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ABSTRACT

The second in a series of annual guides to the literature on alcohol, tobacco, and other drug use among American youth and its prevention, this annotated bibliography for June 1991-June 1992 attempts to bridge the communication gap between practitioners and researchers. This bibliography consists of an indexed collection of 237 references with abstracts that pertain to new developments in etiological research, program evaluations, and promising prevention and intervention strategies. New trends in the literature include comprehensive psychosocial approaches, use and prevention among minority groups, and criticisms of prevention programs' methodologies and objectives. References are indexed by document type and topic. (LMI)

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Western Regional Center
DRUG -FREE SCHOOLS AND COMMUNITIES

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PREVENTION BIBLIOGRAPHY 1991-1992

An Annotated Guide to Information on Alcohol, Tobacco, and Other Drug Use Among Youth

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Annual Prevention Bibliography

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PREVENTION BIBLIOGRAPHY
1991-1992

An Annotated Guide to Information on Alcohol, Tobacco, and Other Drug Use Among Youth

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Robert G. Sieber
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Western Regional Center for Drug-Free Schools and Communities
August 1992

DIRECTOR'S NOTE

This is the second in a series of annual guides to the literature on alcohol, tobacco, and other drug use among American youth and its prevention. It is designed to assist in finding the latest information about this pressing social problem and the most effective strategies for eliminating it, as part of the ongoing efforts of Dr. Austin and the Western Regional Center to promote "knowledge transfer" of research findings to prevention practitioners and the public. The literature on alcohol, tobacco, and other drug abuse is extensive and has been rapidly expanding. Furthermore, because alcohol, tobacco, and other drug research touches upon so many aspects of life and involves so many different interests and research disciplines, information about it is published in a wide variety of scholarly and popular journals. This situation makes it extremely difficult for people other than professional researchers (and even for many researchers) to keep abreast of the latest developments in the field, a problem aggravated by the communication gap between prevention practitioners researchers. This annual review will help alleviate these information problems by helping all concerned stay abreast of new developments in etiological research, program evaluations, and promising prevention and intervention strategies.

Several people's assistance and cooperation made this guide possible. Special gratitude is due to Jerry Bailey and Kelly Andersen at the Southwest Regional Laboratory, and Gail Weinberg at Drug Information Services.

Judith A. Johnson, Director
Western Regional Center for Drug-Free Schools and Communities

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INTRODUCTION

This bibliography consists of an indexed collection of 237 references, with abstracts, to literature on alcohol, tobacco, and other drug use among school-age youth in the United States, and what can be done to prevent or reduce use. It indexes literature received and identified by the authors between June 1991 and June 1992. The main focus is on research—specifically, epidemiological surveys, investigations of risk factors, and prevention and intervention program evaluations. General discussions, literature reviews, and program descriptions were included if relevant to understanding the nature of the problem and to developing programs to address it. The scope of this review is national, but emphasis was given to research dealing with the Western Regional Center's service area. Because of the dearth of information about program effectiveness, program evaluations from other English-speaking countries were included, as well as a comparative study of drug education programs in Western Europe.

Much new literature this year remains critical of research being done in the field and of trends in prevention programs. These criticisms must be taken seriously and practice adapted accordingly. One criticism addresses the quality of evidence about the effects of prevention programs on drug use behaviors. There is also considerable disagreement on what should be the aims of prevention programs, and what methodologies are best-suited and most effective. These concerns must be addressed. At the same time, it is also evident that research and knowledge on promising strategies and approaches is expanding. The documents summarized here support previous conclusions that the new generation of more comprehensive psychosocial approaches are more effective than the older, single-strategy approaches (e.g., didactic, affective, alternative). However, it is also evident that much remains to be done and that important questions remain.

The current bibliography also suggests that increasing attention is being paid to the assessment of alcohol and other drug use and the evaluation of prevention among subpopulations, including ethnic and racial minority groups. While minority populations appear to remain under-represented in research samples, progress must be recognized. It is to be hoped that this trend will continue.

The bibliography lists documents, with their abstracts, alphabetically by author (with references according to APA style). The indices follow: a topic index with entries for subjects, specific drugs, and specific populations covered, and a separate document type

index (Survey, Longitudinal survey, Discussion, Program evaluation, etc.). Index terms which designate population types (e.g., high school students, dropouts, Native Americans), and geographic areas (state names and some regional terms) refer to research or other literature which specifically discusses those populations. The topic index was developed using a revised version of the thesaurus originally created for *Substance Abuse Index and Abstracts.*[1] Both indices list document numbers rather than page numbers.

Author abstracts tend to be limited to a summary of the findings saying little about implications for practice or further research. While this guide draws on existing author abstracts, these abstracts were revised and expanded to better inform our readers, especially in regard to implications for further prevention research and practice. Many new abstracts were written specifically for this annotated bibliography.

In developing this guide, an extensive literature search was conducted through the major computerized databases which contain drug literature, particularly ETOH, produced by the National Institute on Alcohol Abuse and Alcoholism, and DRUGINFO, produced by the University of Minnesota's Drug Information Services. The ERIC database was also extremely valuable. The body of research identified in this manner was expanded by manual searches through books, publishers' lists, and printed current awareness bibliographies—this was very important given the time-lag in updating the databases. This bibliography also benefitted from an arrangement with Drug Information Services, by which they provided us copies of relevant new articles as they received them for database entry. The sources available through the National Clearinghouse for Drug and Alcohol Information were particularly valuable. The bibliography was compiled and indexed through an in-house bibliographic database at the Southwest Regional Laboratory.

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[1] Austin, Gregory, Executive Editor. *Substance Abuse Index and Abstracts. Alcohol, Drug, and Tobacco Research, 1986-1987.* New York: Scientific DataLink, 1989. 5 vols.

BIBLIOGRAPHY

1 Adger, H. J. (1991). **Problems of alcohol and other drug use and abuse in adolescents.** *Journal of Adolescent Health, 12*, 606-613.

Literature on alcohol and other drug use and abuse in adolescents is reviewed. Epidemiological studies of adolescents and young adults provide important information about the frequency, quantity, and types of drugs used among these populations. A number of theories on causation and initiation of use of alcohol and other drugs have been postulated, and each adds important new information to the field. Impressive gains have been made in the identification of risk profiles which lead to alcohol and other drug use. Although this work has been comprehensive in its approach, studying the influences of family and peer factors, psychological and biological variables, and environmental and demographic characteristics, many questions remain unanswered with regard to the distinguishing features of those at risk who progress to problem use.

2 Aguilar, T. E., & Munson, W. W. (1992). **Leisure education and counseling as intervention components in drug and alcohol treatment for adolescents.** *Journal of Alcohol and Drug Education, 37*(3), 23-34.

The association between substance abuse and leisure experiences is illustrated in order to present a rationale for leisure interventions designed to remediate this social and behavioral problem. Leisure education and counseling is suggested for inclusion in broad-based prevention or intervention strategies for substance abuse. Recommendations are provided for strengthening leisure education and counseling programs by including suggestions for theory, content, format and duration.

3 Alberts, J. K., Hecht, M. L., Miller-Rassulo, M., & Krizek, R. L. (1992). **The communicative process of drug resistance among high school students.** *Adolescence, 27*(105), 203-226.

Results are reported from the second of two studies designed to examine social influences on adolescents' responses to drug offers. In the first study, a typology of both drug offers and drug resistance strategies was developed. The present study provides an analysis of the associations between (1) offers and resistance and (2) the differences between drug and alcohol offers. To accomplish this, narrative accounts of both successful and unsuccessful attempts to "say no" were collected from 69 students (24 male, 45 female, 74% Anglo, ranging in age from 11 to 17 years) at a lower-middle-class high school in the southwestern U.S. Students responded to an interview that was based on five open-ended, non-directive questions and that was administered by trained interviewers. Analysis of the interviews indicated that peer pressure was applied in approximately 70% of the offers; however, much of that pressure was applied after the initial offer had been refused. It also was determined that simple offers were more likely with alcohol, while drug offers were more likely to be persuasive and involve pressure during the initial offer. Suggestions of alternative behaviors were both more likely and more successful with alcohol than with other drugs: declining alcohol may be seen as appropriate if one has a specific reason, such

as needing to study or to drive. Setting of the offers also seemed to influence outcome, with some responses more likely to involve pressure than others.

4 Allison, K. R. (1992). **Academic stream and tobacco, alcohol and cannabis use among Ontario High School students.** *International Journal of the Addictions, 27*(5), 561-570.

The relationship is examined between academic stream and cigarette, alcohol, and cannabis use among 2,543 high school students as part of the Ontario Student Drug Survey (1987). Students in basic and general academic streams were found to have significantly higher levels of cigarette, alcohol, and cannabis use compared to advanced level students. The effects of academic stream remained significant (except for alcohol use) when gender, grade average, drug education lessons, and pressure to use these substances were included in multiple regression analysis. The findings indicated that the process of academic streaming needs to be further examined as a possible precipitating factor in drug use.

5 Altman, D. G., Rasenick-Douss, L., Foster, V., & Tye, J. B. (1991, July). **Sustained effects of an educational program to reduce sales of cigarettes to minors.** *American Journal of Public Health, 81*(7), 891-893.

Data is reported from a 1-year follow-up of a sample of stores participating in a 6-month community-wide educational effort to reduce cigarette sales to minors in Santa Clara County, California. The proportion of over-the-counter sales to minors at the 1-year follow-up illustrated that although statistically significant reductions were maintained 6 months after the intervention ended, recidivism had occurred. It is suggested that in order to achieve long-term reductions in sales to minors interventions must be sustained and rely on multiple strategies.

6 Andrews, F. K. (1991). **1990s view of research on youthful alcohol use: Building from the work of Selden D. Bacon.** In P. M. Roman (Ed.), *Alcohol: The development of sociological perspectives on use and abuse* (pp. 175-186). New Brunswick, NJ: Rutgers Center of Alcohol Studies.

Research on youthful alcohol use is reviewed, with a focus on the work of Selden D. Bacon. Topics covered include: (1) youth and alcohol, broadening the research base; (2) precollege drinking; and (3) the use of alcohol and other drugs among young people. Studies have indicated that postchildhood drinking tends to start before college and that college drinking may be seen as a continuation of patterns developed during high school. A positive relationship has been seen between drug use and alcohol use, with the use of marijuana being associated with both illicit drug use and heavier use of licit substances. This so-called "stepping stone" theory of drug use should be further studied, with particular reference to alcohol, tobacco, and marijuana use. It is noted that concepts and measures devised and used in early research continue to be relevant to research of the 1990s, including identification of warning signs, social complications scales, gender differences in attitudes and drinking behaviors, and the relationship between parental drinking behaviors and offspring attitudes and behaviors.

7 Andrews, J. A., Hops, H., Ary, D., Lichtenstein, E., & Tildesley, E. (1991). **Construction, validation and use of a Guttman Scale of adolescent substance use: An investigation of family relationships**. *Journal of Drug Issues, 21*(3), 557-572.

A Guttman scale of substance use was constructed from the self-report data of 639 adolescents' substance use, behavior, parental attitudes, and parental drug use. Results indicated that substance use is uni-dimensional and cumulative. A prospective analysis over two years indicated that the temporal sequence of substance use implied by the Guttman scale represents stages in substance use—adolescents progress from first alcohol use, to first cigarette use, to first marijuana use, and finally, to first use of hard drugs. The extent of use was ignored, and use was collapsed into ever tried and never used for alcohol, tobacco, and marijuana, and never used and used at least once in the last six months for each of eleven "hard" drugs. Only 10% had tried drugs in a pattern different from that predicted by the scale (i.e., those who had used marijuana at least once had also tried alcohol and tobacco at least once, and those who had tried "hard" drugs had also tried all three). Of those who tried a new substance during the period of the study, 74% tried the next substance in the progression predicted by the scale. Relations between adolescent stage of substance use and adolescent "deviancy" validated the order of substances in the scale. Concurrent and prospective relations between the family environment and stage of substance use demonstrated the usefulness of the scale in research on adolescent substance use.

8 Arria, A. M., Tarter, B. S., & Van Thiel, D. H. (1991). **The effects of alcohol abuse on the health of adolescents**. *Alcohol Health & Research World, 15*(1), 52-57.

Most large studies have employed self-reports from national samples of students between the ages of 10 and 18. It is difficult to assess specific health effects of alcohol use from such population-based studies. The most frequently identified "health consequences" of teenage alcohol and other drug abuse have been accidental injury, suicide, and motor vehicle fatalities. It may be premature to assume, on the basis of available data, that adolescents who use alcohol do not experience alcohol-related medical consequences because their use of alcohol is not of a duration needed to produce harmful effects in adults.

9 Athey, J. L. (1991). **HIV infection and homeless adolescents**. *Child Welfare, 70*(5), 517-28.

A review of the literature reveals that homeless adolescents are at extremely high risk for acquiring HIV infection. Sexual and drug use behaviors that put these adolescents at risk are described and new models of social, health, and mental health services for these youth are outlined.

10 Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (1991). **How changes in drug use are linked to perceived risks and disapproval: Evidence from national studies that youth and young adults respond to information about the consequences of drug use.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 133-155). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

A growing body of evidence has been found to support the belief that large proportions of youth and young adults are, in fact, responsive to information about the risks and consequences of drug use. Increased awareness of risk accompanied (or slightly preceded) the decline in marijuana use, and the rather straight-forward hypothesis is offered that the more danger young people associate with a drug, the less likely they will be to use it. Recent evidence—particularly for marijuana and cocaine, but also for alcohol and other drugs in general—has suggested, contrary to popular wisdom, that large proportions of youth and young adults do, in fact, pay attention to new information about drugs, especially about the risks of use, and that they moderate their behavior accordingly.

11 Bailey, S. L., Flewelling, R. L., & Rachal, J. V. (1992, March). **Predicting continued use of marijuana among adolescents: The relative influence of drug-specific and social context factors.** *Journal of Health and Social Behavior, 33*, 51-66.

Little attention has been given to the determinants of continued use of drugs after initiation, even though some researchers have found that the consequences of continued use are more serious than those associated with experimental or occasional use. In this study, a longitudinal sample of 456 secondary and high school students who had already tried marijuana was used to examine the determinants of continued use of marijuana. Nearly 38% of those who had tried marijuana continued using, according to the definition operationalized in this study. Potential predictor measures were grouped in a drug-specific domain and a social context domain, and their effects on continued use, controlling for background characteristics, were examined in logistic regression models. Results showed that only the drug-specific domain had a statistically significant effect on the likelihood of continued use. Students who felt that the adverse physical and psychological effects of marijuana were not very important reasons for discontinuing use and those who had gotten stoned during their experimental stage of use were the most likely to continue use after initiation. The results suggested that the perceived physical and psychological effects of the drug were more important determinants of continued use than were social factors or benefits related to use. Any relationships between social factors and continued use were mediated by the perceived effects and risks of the drug.

12 Baker, K., Beer, J., & Beer, J. (1991). **Self-esteem, alcoholism, sensation seeking, GPA, and differential aptitude test scores of high school students in an honor society.** *Psychological Reports, 69*, 1147-1150.

Twenty-nine high school students (10 males, 19 females), members of an honor society from a rural north-central Kansas school district, were administered the MacAndrew Alcohol Scale, the Coopersmith Self-esteem Inventory-School Form, and the Sensation Seeking Scale (Form V). Their GPAs and the Differential Aptitude Test scores (verbal

reasoning, numerical reasoning, verbal plus numerical reasoning) were collected from their school files. Although ranges were restricted, this group's scores fell within normal levels on these measures. Males scored higher on the MacAndrew scale, verbal plus numerical reasoning, and sensation-seeking, than did females. The seniors and juniors scored higher on sensation seeking than the sophomores. Correlations among scores were of low magnitude and likely reflected social pressures on this small, scholastically able group.

13 Barbor, T. F., Del Boca, F. K., McLaney, M. A., Jacobi, B., Higgins-Biddle, J., & Hass, W. (1991). **Just say Y.E.S.** *Alcohol Health & Research World, 15*(1), 77-86.

The Y.E.S. program grew out of the Regional Youth Substance Abuse Project, a community-based effort to coordinate regional alcohol and other drug abuse services into a continuum of care that would be accessible to urban, suburban, and rural adolescents in the Greater Bridgeport (Connecticut) region. It was decided that an independent assessment and case management agency should serve as the catalyst for the identification of cases, coordination of treatment, development of new services, and containment of service costs. After 2 years of operation, the program has been successfully established, along with an onsite evaluation component. More than 300 adolescent clients have been referred and subsequently evaluated by means of a 6-hour assessment battery. The assessment battery has performed well in terms of client acceptance, information feedback to parents, and usefulness for treatment planning. Most clients have been referred to treatment and intervention services, using treatment assignment guidelines that link the diagnostic test results to specific referral options. To the extent that the mix of inner city and suburban youth recruited from the Greater Bridgeport area is representative of adolescents in other metropolitan areas, the experience of the Y. E. S. program should be useful to program planners and policy makers. As process, outcome, and follow-up data continue to be analyzed by the evaluation team, it should be possible to answer some of the important policy and clinical questions that are currently being asked about assessment and case management for adolescent alcohol and other drug abusers.

14 Bardo, M. T., & Mueller, C. W. (1991). **Sensation seeking and drug abuse prevention from a biological perspective.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 195-207). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Identification of the social, psychological, and biological factors that predict drug abuse risk may have important implications for structuring programs aimed at preventing the onset of abuse in adolescents and young adults. The literature which suggests a relation between sensation-seeking and drug abuse is reviewed, and evidence is discussed which suggests that sensation-seeking and drug-seeking traits may be related because they involve a similar biological mechanism. Recent evidence suggested that sensation-seeking and drug-seeking behaviors may be mediated by similar mechanisms within the brain. Perhaps high sensation-seekers find both drugs and novelty to be especially rewarding because they have a hypersensitive mesolimbic-dopamine reward system. If this is the case, then these individuals could be targeted for prevention programs that provide novel and arousing sensory events that might "satisfy" this brain reward system, thus decreasing the relative rewarding value of drugs. Such sensory stimulation might come from various events, including travel, amusement park rides, physical exercise, and high-energy sports

activities. Whether such sensory events might substitute for the rewarding value provided by drugs remains to be determined.

15 Barnea, Z., Teichman, M., & Rahav. (1992). **Personality, cognitive, and interpersonal factors in adolescent substance use: A longitudinal test of an integrative model.** *Journal of Youth and Adolescence, 21*(2), 187-201.

A multidimensional model of adolescent drug use was tested. The model incorporates sociodemographic variables, personality variables (state and trait anxiety, depressive mood, and sensation seeking), cognitive variables (knowledge, attitudes, and intentions), interpersonal factors (relationships with peers and parents), and the availability of drugs. The model was tested in a longitudinal study, comprising two phases. A total of 1,446 high school students served as subjects. The role of cognitive (attitudinal) and interpersonal factors (relationships with parents and peers) was confirmed. In addition, sensation-seeking proved to have significant predictive power. Anxiety, depression, and sociodemographic factors, by contrast, had virtually no influence. Availability had a minor effect. The multidimensional explanation was validated longitudinally. The factors related to drug use at the first phase predicted use at the second. This multidimensional explanation accounted for the use of various substances, suggesting that different substances—whether legal or illegal—share a common multidimensional explanation.

16 Barovich, M., Sussman, S., Dent, C. W., Burton, D., & Flay, B. R. (1991). **Availability of tobacco products at stores located near public schools.** *International Journal of the Addictions, 26*(8), 837-850.

The nearby store is an obvious major site where adolescents obtain tobacco products. The availability of tobacco products to adolescents at those stores located closest to public junior high and high schools was investigated by: (1) interviewing store personnel; (2) recording types and location of tobacco products, promotional items, and legal-age warning signs within stores; and (3) observing purchasing behavior. Store personnel were interviewed at randomly selected Southern California stores and Illinois stores. Results showed that store personnel used tobacco at twice the rate of the general public, and that they often use tobacco while working at the store. Promotional advertisements were present at many stores, while tobacco use legal age signs were posted at few stores. Approximately 50 of the store personnel admitted that they would sell to minors, and many reported that they had seen teenagers using tobacco near the stores. Several apparently illegal purchases were observed. Based on these findings, two prevention strategies are proposed: (1) teach students to recognize marketing strategies used for tobacco, and to be aware of store influences to use tobacco; and (2) mobilize community forces to influence stores against selling minors, and to discourage minors from loitering.

17 Barrett, A. C., & White, D. A. (1991). **How John Henry effects confound the measurement of self-esteem in primary prevention programs for drug abuse in middle schools.** *Journal of Alcohol and Drug Education, 36*(3), 87-102.

In an evaluation of a statistical primary prevention drug abuse program (the DARE program), the control group outperformed the experimental group on the self-esteem

dimension. A John Henry effect is proposed as a confounding explanation of the self-esteem outcome. A John Henry effect is a phenomenon by which "a control group performs above its usual average when placed in competition with an experimental group that is using a new procedure." Thus, measurement of factors such as self-esteem should be conducted in settings where the control group has not had contact with, or knowledge of, the program in which the treatment group participates. If ancillary effects of primary prevention programs are to be ascertained, students should be induced to indicate how they truly feel about situations, rather than merely provide what they know to be socially approved answers.

18 Bates, M. E., & Pandina, R. J. (1991). **Personality stability and adolescent substance use behaviors.** *Alcoholism: Clinical and Experimental Research, 15*(3), 471-477.

Several personality needs have consistently been identified as placing adolescents at heightened risk for the relatively intensive use of alcohol and other drugs. At the same time, little is known about the natural history of personality change during adolescence as it relates to substance use behaviors. This question is of clear importance to our understanding of personality risk factors for substance use because personality needs appear less temporally stable during adolescence than later in the life span. In this study, prospective longitudinal data were used to investigate the relation of high-risk personality needs to substance use in two groups of adolescents: those who maintained a temporally stable personality need structure across 3 years, and those who showed considerable changes in personality needs during the same time interval. Subjects were 12, 15, or 18 years old at the first test time 1979-1981 and 15, 18, or 21 years old, respectively, at the second test time, 1982-1984. For subjects of both sexes, only those who maintained a temporally stable, low-risk personality profile showed quite conservative substance use patterns across time compared with all others. Generalized personality changes were linked to more intensive substance use behaviors in males, especially among those who had high levels of risky personality needs at the first test time. In contrast, personality change, per se, did not appear as relevant to females' alcohol and other drug use behaviors until combined with information regarding their level of high-risk personality needs. These results indicated that identification of a low-risk personality profile at one point in time was not sufficient to rule out subsequent risk of intensive drug use. It appeared necessary to engage in activity that maintained a low-risk personality profile across time, as only those with temporally stable, low-risk profiles appeared to be protected from increasing substance use during the adolescent years. With identification of a high-risk profile, it seemed that simply reducing or controlling the high risk did not appear to decrease use behaviors, particularly in males with established high use levels.

19 Bauman, K. E., Laprelle, J., Brown, J. D., Koch, G. G., & Padgett, C. A. (1991, May). **The influence of three mass media campaigns on variables related to adolescent cigarette smoking: Results of a field experiment.** *American Journal of Public Health, 81*(5), 597-604.

Findings are reported from a field experiment that evaluated three mass media campaigns designed to prevent cigarette smoking by adolescents. Two Standard Metropolitan Statistical Areas received each treatment, and four served as controls. The first campaign featured radio messages on consequences of smoking only; the second included the radio broadcast of the consequences of use messages as well as a program to stimulate personal encouragement of peers not to smoke; the third used some of the radio messages on

consequences of use, and used television to promote the peer program. The radio-only campaign had a modest influence on the expected consequences of smoking and friend approval of smoking. The more expensive campaigns involving television were not more effective than those with radio alone. The peer-involvement component was not effective, and any potential smoking effects could not be detected. Although these results cannot be generalized to all mass media applications, they suggest that the greater cost of television may not be worthwhile, and call into question the value of informal, unsupervised peer programs.

20 Bayatpour, M., Wells, R. D., & Holford, S. (1992). **Physical and sexual abuse as predictors of substance use and suicide among pregnant teenagers.** *Journal of Adolescent Health, 13*, 128-132.

In order to better define risk factors for perinatal substance abuse, data from 352 pregnant teenagers enrolled in a comprehensive prenatal clinic were analyzed. The average age of subjects was 15, 82% were of minority descent, and all were receiving public assistance. At their first visit, a social worker obtained information of their home environment, family history, education, peer relationships, physical and mental health, and history of substance use. Following the interview, all teens were given a complete prenatal examination, including drug toxicology screening. The results indicated relatively low rates of substance use based on toxicology at the time of enrollment (3.6%). Self-reported rates of substance use prior to awareness of conception varied from 23% for tobacco to 17% for alcohol and marijuana; 7% of the subjects reported use of illicit substances after conception was confirmed. In addition, 80 of the 352 subjects acknowledged having been physically or sexually abused and 40 admitted to having suicidal ideation or actions. A comparison of those teenagers who had been physically or sexually abused with the remaining cohort revealed significant differences on marijuana ($p<0.01$) and cocaine ($p<0.05$) use prior to awareness of conception and on prior suicidality ($p<0.0001$). A positive history of physical or sexual abuse delineated a subset of pregnant teenagers who were at high risk for self-destructive behaviors. Teenagers in prenatal clinics should be screened, not only for current and past substance use, but also for sexual and physical abuse, domestic violence, and suicidal thoughts and actions.

21 Beauvais, F. (1992). **An integrated model for prevention and treatment of drug abuse among American Indian youth.** *Journal of Addictive Diseases, 11*(3), 63-79.

American Indian youth have been shown to be at high risk for drug abuse. Epidemiological studies of Indian school students over the past two decades have revealed rates of use consistently higher than those found for other youth. Socioeconomic and historical factors have led to conditions that put a great deal of stress on the family and other support systems which in part account for the seriousness of the problem. A model is presented which can guide both prevention and treatment efforts addressing drug abuse in Indian communities. Five variable domains—social structure, socialization factors, psychological variables, peer associations and drug use—are related in an integrated structure. By following the progression of the etiological variables, a stepwise plan can be developed to organize interventions. Although the model has immediate utility, a number of further research questions are outlined that will enhance its application.

22 Bechtel, L. J., & Swisher, J. D. (1992). **An analysis of the relationships among selected attitudinal, demographic, and behavioral variables and the self-reported alcohol use behaviors of Pennsylvania adolescents.** *Journal of Alcohol and Drug Education, 37*(2), 83-93.

The relationships were evaluated among attitudinal, demographic, and behavioral variables and the self-reported alcohol use behaviors of adolescents. The subjects (N=7,799) comprised a representative sample of male and female students enrolled in 26 school districts throughout Pennsylvania during the 1983-84 and 1984-85 academic years. Data were analyzed using the multiple correlation-regression procedure which incorporated self-reported use of alcohol as the dependent variable. Independent variables included: behavioral intention; attitude toward school; school misconduct; time spent on sports activities, extracurricular activities, religious activities, and academic activities; grade average; gender; and grade level. Alcohol use was highly correlated with the composite effects of the variables tested. Behavioral intention and school misconduct were positively related with alcohol use. Time spent on religious activities was negatively correlated with alcohol use.

23 Beck, K. H., & Lockhart, S. J. (1992). **A model of parental involvement in adolescent drinking and driving.** *Journal of Youth and Adolescence, 21*(1), 35-51.

Research findings are reviewed on why adolescents drink and drive, and what parents' knowledge, attitudes, and practices are related to youthful impaired driving. It is suggested that parents' effectiveness at preventing alcohol use and alcohol-impaired driving among their teenagers depends upon their stage of involvement. The different stages of parental involvement are defined as awareness, acceptance, action, and consequences. The specific components of these stages are described, and evidence is presented indicating that parents tend to be unaware of the true extent and nature of teen drinking, and thus less prone to acceptance and action.

24 Beck, K. H., Summons, T. G., & Matthews, M. P. (1991). **Monitoring parent concerns about teenage drinking and driving: A focus group interview approach.** *Journal of Alcohol and Drug Education, 37*(1), 46-57.

A series of qualitative focus group interviews was conducted in 1988 with parents of teenagers in a middle-class suburban Maryland high school. The purpose was to explore their in-depth perceptions of the alcohol consumption patterns of their children, as well as the influences on their consumption and appropriate interventions. The results indicated: (1) low levels of parental awareness about the true extent of teen drinking, especially among their own children; (2) low levels of parental control or empowerment over teen drinking; (3) feelings of detachment or isolation from other parents who may share similar concerns; (4) considerable receptivity to receiving skill training in the area of DWI and other substance abuse prevention issues; and (5) feelings of resistance to such programs that may require substantial time commitments of them, but more favorable disposition toward mass mediated delivery systems of this material.

25 Beck, K. H., Summons, T. G., & Thombs, D. L. (1991). **Factor analytic study of social context of drinking in a high school population.** *Psychology of Addictive Behaviors, 5*(2), 66-77.

A factor analysis was performed on a variety of items measuring the social contact of drinking in an adolescent suburban population. Four distinct factors that emerged from this analysis suggest that drinking in this age group occurs for several reasons including negative affect abatement, where alcohol is used primarily to feel better about oneself and to cope with stress; conviviality, where alcohol is used to be sociable and to have a good time at parties; under parental control and supervision, primarily in one's own home; and at a bar and in a dormitory, where the likelihood of drinking and driving is increased. Scale scores derived from these factors differed significantly across two self-report measures of alcohol-impaired driving and drunkenness. A discussion of these findings and their implications identifies ways to match various alcohol abuse prevention approaches to specific patterns of consumption in this age group.

26 Beck, K. H., & Zannis, M. (1992). **Patterns of alcohol consumption among suburban adolescent Black high school students.** *Journal of Alcohol and Drug Education, 37*(2), 1-13.

A survey was given to 392 Black and 1,173 White students in a middle class, suburban Maryland high school by means of an anonymous questionnaire designed to uncover the social context of youth drinking. Results showed that the Black adolescents: (1) drank smaller quantities less frequently than the Whites; (2) were more likely to be non-drinkers, were less likely than the Whites to drive while drunk; (3)were twice as likely as the Whites to report never having been drunk; and (4) were less likely to use alcohol for relief of physical pain, stress, or sleeplessness.

27 Beisecker, A. E. (1991). **Interpersonal approaches to drug abuse prevention.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 229-238). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Preventive interventions utilizing interpersonal communication approaches include the teaching of interpersonal and intrapersonal competencies, the creation of an environment that can respond to emotional and social needs as well as to needs for information, and the provision of alternative activities in a social setting. Interpersonal and intrapersonal competencies include strategies to build or enhance self-esteem, assertiveness skills, and skills to combat peer pressures. Adolescents need to be taught how to say "no" to drugs. Decision-making techniques, problem-solving techniques, and techniques to cope with anxiety, nervousness, and anger are also beneficial educational skills that might be provided by abuse prevention programs. Like information, an interpersonal communication element is likely to be a necessary, but not sufficient, component in a successful drug abuse prevention program.

28 Bentler, P. M. (1992). **Etiologies and consequences of adolescent drug use: Implications for prevention.** *Journal of Addictive Diseases, 11*(3), 47-61.

Recent results and work in progress are reviewed from a longitudinal study of drug use etiologies and consequences. Early- and mid-adolescent drug use patterns, personality, and behavioral correlates were studied in a large sample of junior high school students in Los Angeles County, California, beginning in 1972. To determine the correlates and consequences of adolescent drug use, controlling for related tendencies such as lack of social conformity and deviant friendship networks, 654 youngsters were followed into young adulthood and their behaviors and lifestyles evaluated on five occasions over a period of 12 years, ending in 1984. Teenage drug use was found to disrupt many critical developmental tasks of adolescence and young adulthood. Tendencies to use many different drugs as an adolescent led in young adulthood to increased drug crime involvement, decreased college involvement, increased job instability, income, psychoticism, and stealing episodes. Intervention efforts should be directed not towards preventing experimental drug use, but should focus on drug misuse and abuse, as well as on improving personal maturity, social skills, and economic opportunities.

29 Bianco, D. M., & Wallace, S. D. (1991). **Chemically dependent female adolescent: A treatment challenge.** In T. M. Rivinus (Ed.), *Children of chemically dependent parents: Multiperspectives from the cutting edge* (pp. 173-225). New York: Brunner/Mazel.

A report is given on a 1983 follow-up study of residents of a Rhode Island residential treatment facility for females only, Caritas House, evaluating outcome in light of post-release life events. Of particular interest are the roles of the family, the treatment program, and society in the origin, maintenance, and alleviation of chemical dependency in female adolescents. The purpose of the study was to determine what criteria contributed to the success of this residential substance abuse treatment program for adolescent females. The sample included 73 residents discharged between 1975 and 1980, classified according to outcome rating scale measuring post-discharge functioning: criminal activity, substance use and treatment, productive activities, relationships with parent figures, and overall success. Certain family, client and treatment variables were identified that maximize treatment effectiveness. The basic ingredients for meeting the needs of troubled adolescents were family involvement, nurturing, removal from pressure and structure of the treatment program. The study also identified some weaknesses in the program, such as length of stay in residence, a too-short transition period, and insufficient structured follow-up and aftercare.

30 Black, G. S. (1991). **Changing attitudes toward drug use: The effects of advertising.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 157-191). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

In a three- to four-wave tracking study, the first wave was essentially a baseline measurement of the attitudinal basis of drug abuse. The objectives of the study were to: (1) provide information useful to the design of advertising; (2) obtain specific recall measures of the advertising; and (3) track attitudinal changes over the course of at least the first 3 years of this advertising effort. The first wave was conducted during January and February 1987 by screening prospective respondents at malls and colleges across the

United States. There were four discrete samples: 884 children ages 9-12; 789 teenagers ages 13-17; 942 college students; and 4,737 adults. Of children aged 9-12, 16% had already been approached to buy or use drugs, and 15% agreed that it is easy to get marijuana. Of the 13-to-17-year-olds, 12% reported having tried marijuana and 8% had tried cocaine. The incidence of all forms of use increased steadily into the late 20s, when it started to decline. Lifetime cocaine use peaked at 38% among those 26-30, and lifetime marijuana use peaked at over 70%. College students reported lower use patterns than their non-college counterparts. Lifetime use reflected the pattern of exposure through experimentation over time, and the growth in lifetime use as one moves down on the age scale demonstrated the increasing penetration of drugs during the 1960s, 1970s, and early 1980s. The data are remarkable for the consistency of the effect of respondents in the high exposure areas. With many of these changes, virtually all of the shifts in attitudes over the past year appeared in those areas. The effect was so strong and so widespread in the data set that it suggests the possibility that such advertising has to reach a threshold before it begins to have much effect in the rest of the country. The second wave, conducted in February and March 1988, followed ten months of anti-drug advertising by the Partnership for a Drug-free America, and attempted to measure the effect of that advertising. Many attitudes and orientations became distinctly more antagonistic towards drug use in each of the samples. The changes were most pronounced in the college sample, followed by the children (ages 9-12). There was virtually no significant movement in the opposite direction. Drug abuse attitudes and beliefs are not the same as views on consumer products. In most instances, these attitudes are held strongly by individuals, with few people who are indifferent or undecided. Moreover, these attitudes are strengthened by reinforcing effects from friends, family, and other influencing agents. The data have already shown the powerful impacts, both favorable and unfavorable, of friendship networks on drug abuse. Even with the strength of the orientations, however, the data strongly supported the conclusion that advertising can affect the attitudes of Americans toward drug abuse.

31 Bloch, L. P., Crockett, L. J., & Vicary, J. R. (1991). **Antecedents of rural adolescent alcohol use: A risk factor approach.** *Journal of Drug Education, 21*(4), 361-377.

The association between risk factors and alcohol use was examined over two years in a sample of 463 junior high school students in a rural Pennsylvania community. Family relations, family structure, marks in school, participation in academic activities, frequency of church attendance, and deviant behavior were found to be significantly associated with alcohol use two years later. No gender or age differences were found in these predictors of alcohol use. These six risk variables were combined to form a risk index. A 3x2x2 ANOVA (User group by Gender by Grade) was used to examine the association between the risk index score at Year 1 and level of alcohol use at Year 3. Only the main effect for User group was significant. Thus, the number of risk factors at Year 1 was predictive of alcohol use at Year 3, suggesting that risk factors operated additively. The risk index also predicted frequency of alcohol use in a replication sample. The three user groups identified—abstainers, experimental users, and regular users—associated significantly with levels of use of both beer and liquor. Contrary to expectations, self-esteem and emotional tone did not significantly predict future level of alcohol consumption. These results suggested that there may be some differences between the risk factors operating among rural and urban adolescents. The failure to find significant grade or gender differences suggested that the identified risk factors operated in the same way for males and females, and for 7th- and 9th-graders. Accordingly, it is proposed that prevention programs for

both genders and various grades should target similar domains, recognizing the importance of various risk factors, and normative versus problem use.

32 Blum, R. W., Harmon, B., Harris, L., Bergeisen, L., & Resnick, M. D. (1992). **American Indian-Alaska Native youth health.** *JAMA, 267*(2), 1637-1644.

Risk behaviors, health problems, worries and concerns, and resiliency-promoting factors among American Indian-Alaska Native adolescents were assessed from a study pool of 7th- through 12th-grade youths (N=13,454). Poor physical health was reported by 2% of the study sample and was significantly correlated with social risk factors of physical and/or sexual abuse, suicide attempts, substance abuse, poor school performance, and nutritional inadequacies. Injury risk behaviors included not wearing seatbelts, drinking and driving, and riding with drunk driver. The prevalence of physical and sexual abuse was 10% and 13%, respectively, with about 24% of females reporting physical abuse and 22% reporting sexual abuse by the 12th grade. Factors such as emotional stress, suicide, and sexual activity were also measured. Weekly or more frequent alcohol use rose from 8% of 7th-graders to 14% for the 12th grade. For males, an increase of 3-5% a year, in regular alcohol use, to 27% by the 12th grade was observed. For each variable measured, rates for American Indian adolescents were much higher when compared to those of rural White Minnesota youth, except for the age of initial sexual activity or alcohol use. It is concluded that since American Indian and Alaskan Native adolescents reported high rates of health-compromising behaviors and risk factors related to unintentional injury and substance abuse, interventions must be culturally sensitive, acknowledge the heterogeneity of Indian populations, be grounded in cultural traditions that promote health, and be developed with full participation of the involved communities.

33 Bodinger-de Uriarte, C., & Austin, G. (1991, September). ***Substance abuse among adolescent females.*** (Prevention research update 9). Portland, OR: Western Center for Drug-Free Schools and Communities.

Alcohol and other drug patterns of use and prevalence among adolescent females vary by substance. Alcohol has remained the drug of choice for high school females, followed in descending order by tobacco, marijuana, and amphetamines. The proportion of adolescent females using drugs rapidly decreased across other categories. This pattern differs from that of their male contemporaries in that 4% more females smoke cigarettes and 10% more females take amphetamines. For all other substances, however, females take fewer drugs and take drugs less often than do males. The available research on adolescent females is examined and supplemented by logical extensions of research on adult women and adolescents in general, in order to indicate overall use patterns and problems, factors influencing use, and issues that need to be considered in designing prevention programs. There are several important gender differences in regard to substance use which can be generalized. Adolescent females may simultaneously use different substances for various substance-specific reasons. For both genders, tobacco and alcohol use are often described as correlated, but adolescent females smoke for different reasons not given by adolescent males. This may explain, in part, why females smoke more than males, but are just beginning to approach the drinking levels of males. The belief that smoking aids weight control is strongly correlated with female adolescent smoking behavior. The more cigarettes an adolescent female smokes, the more likely she is to state that smoking helps her keep her weight down. Adolescent females may smoke to enhance appearance, whereas no parallel motivation is found for adolescent males. On the other hand, adolescent females

are more likely than males to cite drinking as an aid to sociability, getting along on dates, alleviating sexual anxiety, and relaxing. Further, females are less likely to report social pressure as a reason to drink than are males. Females are more likely to gather information about alcohol and other drugs from a variety of sources, including newspapers and television, than are males, who cite personal experience as the best source of information. Females more often acknowledge alcohol and other drug use as a risk and as potentially harmful than do males. Females score higher than males in reasoning through drug-related dilemmas.

34 Bosworth, K., & Bukoski, W. J. (1991). **DIADS: Computer-based system for development of school drug prevention programs.** *Journal of Drug Education, 21*(3), 231-245.

The Drug Information, Assessment and Decisions for Schools (DIADS) is a computer-based information and decisions support system for the develop of school drug abuse prevention programs. DIADS provides access to a cost-effective planning resource that has information on programs about alcohol, other drugs, and prevention. Also, DIADS helps the school assess the effectiveness of its current prevention efforts using an expert-generated school assessment model containing fourteen factors. Feedback from the assessment provides suggestions for improvements in current prevention programs. DIADS guides the selection of future activities and helps in program planning. Pilot tests of DIADS at several sites indicates school personnel find the information on DIADS helpful, timely, and easy to access.

35 Botvin, G. J., Botvin, E. M., Baker, E., Dusenbury, L., & Goldberg, C. J. (1992). **The false consensus effect: Predicting adolescents' tobacco use from normative expectations.** *Psychological Reports, 70*, 171-178.

A longitudinal sample of 916 adolescents was examined to assess the extent to which the perceived smoking prevalence of adults' or peers' smoking was related to cigarette smoking. Questionnaires were distributed to junior high school students in Grade 7 and again in Grade 9. Prevalence of perceived peers' smoking and prevalence of perceived adults' smoking were significantly related to cigarette smoking both cross-sectionally and longitudinally. Adolescents who believed that half or more than half of all adults or peers smoked cigarettes showed the most smoking involvement, and those who believed that fewer than half of adults or peers smoked were least involved. These findings provide further evidence that adolescent normative expectations about cigarette smoking are an important determinant of smoking initiation.

36 Botvin, G. J., Baker, E., Goldberg, C. J., Dusenbury, L., & Botvin, E. M. (1992). **Correlates and predictors of smoking among Black adolescents.** *Addictive Behaviors, 117*, 97-103.

In a study of the correlates and predictors of smoking among inner-city Black 7th-graders (N=608), enhanced self-reports of cigarette smoking were collected along with data concerning demographic, social, and psychological factors hypothesized to promote smoking initiation. Results indicate that social environmental factors, such as the smoking status of friends and siblings, and individual factors, such as refusal assertiveness, general

assertiveness, and age are predictive of current smoking. Similarly the smoking status of friends, attitudes concerning the harmful effects of smoking, and low self-esteem concerning school are predictive of behavioral intention to smoke in the future. Overall, the factors that were the most salient predictors of smoking for the Black adolescents in this study were generally congruent with findings reported in the existing literature for other populations.

37 Brinson, J. A. (1991). **A comparison of the family environments of Black male and female adolescent alcohol users.** *Adolescence, 26*(104), 877-884.

To examine Black American adolescents' use of alcohol and their perceptions of their family environments, 71 participants between the ages of 12 and 20 from a large mid-Atlantic medical facility, who reported using alcohol, were asked to complete the Family Environment Scale (FES), the Alcohol and Drug Information Screening Questionnaire, The Drug Exposure Response Sheet, and an intake and referral form. Users were described as those who drank at least once a week and used medium amounts per occasion. Females were hypothesized to have higher scores on the FES than males (higher scores on the FES suggest a more favorable perception of family functioning). A *t* -test was conducted to compare group means on each subscale of the FES. Analyses of the data indicated that females differed significantly from males ($p < .05$) on four of the ten subscales, tending to view family functioning somewhat more favorably. Although the exact nature of the differences is not clearly understood, it is suggested that they may be consistent with sex role socialization processes.

38 Buckhalt, J. A., Halpin, G., Noel, R., & Meadows, M. E. (1992). **Relationship of drug use to involvement in school, home, and community activities: Results of a large survey of adolescents.** *Psychological Reports, 70*(11), 139-146.

All students in grades 7, 9, and 11 in the 129 school districts of Alabama responded to a 466-variable survey that primarily assessed drug use, but also contained questions about involvement in various activities. From 130,397 usable surveys, meaningful relationships were found between students' involvement in school, family, and church activities and reported use of tobacco, alcohol, and marijuana. Factors reflecting the extent of parental supervision were also related to the reported use of those substances.

39 Bukoski, W. J. (1991). **A framework for drug abuse prevention research.** In C. G. Leukefeld, & W. J. Bukoski (Eds.), *Drug abuse prevention intervention research: Methodological issues* (pp. 7-28). (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

Research interest in the efficacy and effectiveness of drug abuse prevention programs has increased dramatically over the past 10 years, resulting in closer scrutiny of the quality and appropriateness of research methods, tests and measures, as well as data analysis procedures used for program evaluations. Efficacy refers to determining treatment effects resulting from an experimental assessment that has internal validity. Effectiveness research assesses the generalizability of the intervention when implemented under real-world

conditions. Concern about conducting quality prevention research has been prompted by increased public recognition of the drug abuse problem, growing pressure to take effective action, and a substantial increase (since 1986) in Federal support for drug-related law enforcement, treatment, and prevention to fight the "war on drugs."

40 California State Dept. of Education. (1991). ***Not schools alone: Guidelines for schools and communities to prevent the use of tobacco, alcohol, and other drugs among children and youth.*** Sacramento, CA: Department of Education.

Although schools have the primary responsibility for educating children and adolescents, schools alone cannot prevent the use of tobacco, alcohol, and other drugs. Preventing youth from smoking, drinking, and using drugs must be a collaborative effort, jointly undertaken by the school, community, and youths themselves. This guide was developed to explain the partnerships that schools and communities can create to share the responsibilities of planning, funding, and implementing preventive strategies and programs. The first section presents a conceptual framework for planning by reviewing the extent of the substance abuse problem among youth, identifying misconceptions that lead to ineffective programs, defining drug use as a behavioral problem determined by many systems of influence, exploring the need for an integrated approach to prevention, identifying both risk and protective factors within students' influence groups, formulating a new definition of prevention, and introducing a comprehensive health approach to drug prevention. The next section develops a leadership role for schools, explaining how to build a partnership among schools, law enforcement, and the community; identifying the planning steps; recommending a comprehensive program for the school site; considering community- and school-based program strategies; and listing criteria for preventive programs and curricula. The final three sections of the guide look briefly at the intervention plan, school policy, and program support. Relevant sections of California legal codes, resources, and references are appended.

41 Caplan, M., Weissberg, R. P., Grober, J. S., Sivo, P. J., Grady, K., & Jacoby, C. (1992). **Social competence promotion with inner-city and suburban young adolescents: Effects on social adjustment and alcohol use.** *Journal of Consulting and Clinical Psychology, 60*(1), 56-63.

The impact of school-based social competence training was assessed on skills, social adjustment, and self-reported substance use of 6th- and 7th-graders (N=282) at one inner-city middle school and one suburban middle school (109 in the program group, and 173 in the control) in Connecticut. Training emphasized broad-based competence promotion in conjunction with domain-specific application to substance abuse prevention. The 20-session program comprised six units: stress management, self-esteem, problem solving, substances and health information, assertiveness, and social networks. Findings indicated positive training effects on subjects' skills in handling interpersonal problems and coping with anxiety. Teacher ratings revealed improvements in subjects' constructive conflict resolution with peers, impulse control, and popularity. Self-report ratings indicated gains in problem-solving efficacy. Results suggest some preventive impact on self-reported substance use intentions and self-reported excessive alcohol use, compared to control groups, but no measurable effect on self-reported experimental substance use. In general, the program was found to be beneficial for both inner-city and suburban students.

42 Cassel, R. N. (1992). **Peer counseling using cognitive education to prevent high risk youth from drug abuse.** *Psychology, A Journal of Human Behavior, 29*(1), 38-43.

Project PEER COUNSELING (PC) is a portion of the California Masonic Drug Abuse Education Program in connection with the public schools. Initially, it seeks to prepare members of the Masonic youth groups as "peer counselors", and later in the school year to reach out into the community and include all youth of the area. The notion underlying peer counseling derives from "sublimation theory" where each individual is developed into his/her own "watchdog" and/or role model as a drug abuse prevention base. It includes all 3 of the Masonic youth groups generally from 11 to 18 years of age: Demolays, Rainbow Girls, and Job's Daughters.

43 Chandler, J., & Page, R. (1991). **Adolescent drug use in a southern, middle-class metropolitan high school.** *School Counselor, 38*(3), 229-235.

Patterns of drug use were measured in a sample of 240 middle to upper-middle class high school students, 30 males and 30 females from each grade (9-12) at a metropolitan county Georgia high school. Approximately 8% of the total school enrollment (1,427) was Black. Alcohol use was much more prevalent than was marijuana use, and there was little evidence that many students had ever used cocaine in any form, depressants, PCP, or LSD. Even though only 17% of the 10th-grade females indicated they had tried marijuana only once, in contrast to 33% of the 10th-grade males, a greater percentage of the 10th-grade females (13%) indicated using marijuana at least monthly. More 11th-grade females than 11th-grade males reported using marijuana: in all the other grade levels, on the other hand, the males used marijuana more than the females. Of all subjects in grade 12, 43% indicated they had never used marijuana, while 23% of the 12th-grade females, and 27% of the 12th-grade males, indicated they had tried marijuana once. Of the students at this school who reported being involved in extracurricular activities, 67% indicated they had never used marijuana, 21% indicated they had tried marijuana once, and 1% indicated daily use. Of those young people living with both parents, 64% indicated no marijuana use, whereas 46% of the students who lived with their mothers only reported having used marijuana one or more times. A larger number of students who planned to attend college had not used marijuana than those who planned to go directly to work or to enter the military. Nearly half (49%) of all the students indicated they first tried marijuana out of curiosity. Of those who had used marijuana, 71% said it was given to them, and only 29% said they had paid for it. Contrary to usual expectations, only 58% of those who had tried marijuana had smoked cigarettes first. More students drank in the 12th grade than in any of the other grades. Daily use of alcohol was indicated by 10% of the 9th grade, and 3% of the 11th-grade males; all of the other students in other grades reported no daily use of alcohol. Only 5% of the students who participated in extracurricular activities had not used alcohol, while 38% of those students who were involved in extracurricular activities indicated at least monthly use. Of the 174 sample members who lived with both parents, 16% had not used alcohol, while only 5% of those living with a mother had not used alcohol. Of those who planned to go to college and of those who planned to go directly to work after graduation, the same proportion, 15%, indicated they had not used alcohol. Of those who used alcohol, 6% of the users said they first tried it because of boredom, 24% recreation, 15% that everyone does it, 36% curiosity. When asked how many of their friends regularly used alcohol, 10% of the respondents said none, 43% some, 34% most, and 14% all; furthermore, 43% indicated that they saw nothing "wrong" with their friends using alcohol. Alarmingly, 40% of those who drank indicated that drinking alcohol did not affect their

ability to drive an automobile, 21% of them indicated they had driven a car while drunk; and 81% of drinkers indicated that drinking alcohol did not affect their school performance.

44 Chassin, L., Rogosch, F., & Barrera, M. (1991). **Substance use and symptomatology among adolescent children of alcoholics.** *Journal of Abnormal Psychology, 100*(4), 449-463.

The magnitude and specificity were assessed of parental alcoholism as a risk factor for internalizing symptomatology, externalizing symptomatology, and alcohol and drug use in adolescence. Parents' and children's reports of symptomatology and children's reports of alcohol and drug use in a community sample of 454 adolescents were evaluated. The sample included an experimental group of 246 children of alcoholics (118 females and 128 males), with an average age of 12.6 years, and a control group of 208. The results showed that parental alcoholism was a moderate to strong risk factor, with stronger risk associated with recent (rather than remitted) parental alcoholism. Multivariate analyses showed that specificity of risk varied with the outcome measure. In predicting externalizing symptomatology, the risk associated with parental alcoholism was mediated by co-occurring parental psychopathology and environmental stress. However, in predicting alcohol use, the father's alcoholism was a specific risk factor above and beyond the more generalized effects of stress and family disruption.

45 Chatlos, J. C. (1991). **Adolescent drug and alcohol addiction: Diagnosis and assessment.** In N. S. Miller (Ed.), *Comprehensive handbook of drug and alcohol addiction* (pp. 211-233). New York: Marcel Dekker.

An attempt is made to develop and apply a holistic bio-psychological approach to diagnosis, assessment, and treatment of adolescent alcohol and other drug use. There has been a downward trend over the 1980s in overall consumption and lifetime prevalence of use. The bio-psychological model of addiction in adolescents focuses on psychological addiction rather than physiological, centering on altering mood, rather than physical need. Four stages are projected: (1) experimentation—learning the mood swing of use; (2) regular use—seeking the mood swing; (3) daily preoccupation with use—preoccupation with the mood swing; (4) dependency—using to feel normal. This model sees the family as an important source of support for use, and calls for family assessment and treatment, as well as medical, psychiatric, and counselor interview assessments and treatment.

46 Chatlos, J. C. (1991). **Adolescent drug and alcohol addiction: Intervention and treatment.** In N. S. Miller (Ed.), *Comprehensive handbook of drug and alcohol addiction* (pp. 235-253). New York: Marcel Dekker.

The treatment approach is presented based on the bio-psychological disease model, which focuses on a comprehensive treatment for adolescents. Adolescent chemical dependency (ACD) treatment has been mostly based on successful adult treatment programs developed by the Johnson Institute and Hazelden Foundation in Minnesota. The Minnesota Model involves a short- to intermediate-term inpatient program (28-60 days), with an intensive group therapy approach based on the Disease Concept and the 12 Steps of Alcoholics Anonymous (AA), using chemical dependency counselors as primary therapists. Acute

care is followed by extended aftercare for several months to over a year. Alternative care such as outpatient programs or day treatment programs have been developed using the concepts approaches, and techniques already proven successful. It is concluded that a combination of the bio-psychological model and the Transformational Model of treatment, utilizing the 12 Steps of AA, allows professionals from multiple discipline to work using various paradigms. These models are said to be extremely empowering to patients, staff, educators, parents and the general public, assisting adolescents to transform the crisis of addiction into the opportunity of living with integrity, vitality, and excellence.

47 Chatlos, J. C., & Tufaro, J. D. (1991). **Treatment of the dually diagnosed adolescent.** In M. S. Gold, & A. E. Slaby (Eds.), *Dual diagnosis in substance abuse* (pp. 253-288). New York: Marcel Dekker, Inc.

Literature on the treatment of adolescents with a dual diagnosis is reviewed, covering the diagnosis of substance abuse with anxiety disorders, thought disorders, neurological disorders, mood disorders, anorexia nervosa and bulimia nervosa; diagnosing dual diagnosis patients; a psychodynamic perspective of drug use and addiction as self-medication; and psychopathology resulting from substance abuse. Topics covered include: (1) extent of the problem; (2) adolescent chemical dependency syndrome; (3) biopsychosocial model; (4) family factors; (5) dual diagnosis and biopsychosocial model; (6) assessment; (7) National Institute on Drug Abuse (NIDA) adolescent assessment-referral system; (8) substance use/abuse; (9) medical; (10) psychiatric evaluation; (11) family assessment; (12) psychosocial assessment; (13) treatment; (14) inpatient treatment; (15) 12 steps; (16) therapeutic progression; (17) family treatment; (18) Family Week; and (19) outpatient treatment. A summary of recently developed or in-progress adolescent chemical involvement assessment tools is presented in tabular form.

48 Chavez, E. L., & Swaim, R. C. (1992). **Epidemiological comparison of Mexican-American and White non-Hispanic 8th- and 12th-grade students' substance use.** *American Journal of Public Health, 82*(3), 445-447.

Surveys of drug and alcohol use were conducted with a national probability sample of 8th- and 12th-grade Mexican- American and White non-Hispanic youth. The drug and alcohol epidemiology was representative of US Mexican-American youth residing in communities with populations of 2,500 or more, at least 10% of whom are Mexican Americans. Mexican-American 8th-graders reported generally higher rates of use than White non-Hispanics, based on life-time prevalence and use in last month. They also reported higher frequency of high-risk drug behaviors. The pattern was reversed among 12th-grade students. The impact of differential school dropout rates is discussed as a probable cause for this reversal.

49 Clayton, R. R., & Cattarello, A. (1991). **Prevention intervention research: Challenges and opportunities.** In C. G. Leukefeld, & W. J. Bukoski (Eds.), *Drug abuse prevention intervention research: Methodological issues* (pp. 29-56). (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

An overview is provided of drug abuse prevention research and discuss several methodological issues from the authors' current research, which focuses on assessing the Kentucky Drug Abuse Resistance Education prevention program.

50 Clayton, R. R., Cattarello, A., Day, L. E., & Walden, K. P. (1991). **Persuasive communication and drug prevention: An evaluation of the DARE program.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 295-313). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Data are presented from an evaluation of the short-term effectiveness of Project DARE (Drug Abuse Resistance Education) as implemented in Lexington, Kentucky. DARE is a school-based, primary prevention program aimed at elementary school-aged children in either the 5th or 6th grades. The curriculum is taught by police officers who have completed an 80-hour training course designed to prepare them for working with elementary-aged children in the classroom and for delivering a specific curriculum. This report focuses on short-term results in that it examines changes from the pre- to posttest period, a time span of 17-19 weeks. The focus of the evaluation is twofold. First, the effects of the DARE curriculum on students' attitudes toward drug use (both general and substance specific), peer-related factors, self-esteem, and self-reported substance use are examined. Significant treatment effects were found on general attitudes towards drugs, and negative attitudes towards alcohol, cigarettes, and marijuana. However, the results showed no significant differences between the DARE students and the control group on reported involvement with cigarettes, alcohol, or marijuana. This lack of significant differences could be more a reflection of low baseline rates of use than evidence of lack of effect. Second, in viewing the program from a persuasive communications standpoint, the results are examined separately for each of the four police officers delivering the DARE curriculum. The results suggest that a simple focus on "outcomes" may ignore important differences in both personal and teaching styles and differential persuasive communication skills that may need to be matched to the modal learning styles of students. These may vary considerably within schools by classroom and across schools by ecological types of variables that are not school based.

51 Cochran, J. K. (1992). **Effects of religiosity on adolescent self-reported frequency of drug and alcohol use.** *Journal of Drug Issues, 22*(1), 91-104.

Homogeneous effects cumulative logistic regression is used to examine the effects of personal religiosity on adolescent self-reported frequency of drug and alcohol use. Survey data from a sample of 3,065 male and female adolescents in grades 7 through 12 in three midwestern states are employed. While the existence of an inverse religiosity-substance use relationship is well documented, questions still exist concerning the nature of these relationships. A review of the literature reveals three rival hypotheses concerning variation

in the strength of these relationships across drug types: the Anti-Asceticism hypothesis, which predicts stronger relationships among the "softer" drug types; the Moral Condemnation hypothesis, which predicts stronger relationships among the "harder" drugs; and the Hellfire hypothesis, which predicts stable effects across drug types. Findings from the survey provide strong support for the more general Hellfire hypothesis, with equivalent parameter estimates for the effects of religiosity observed for each drug type. However, slightly weaker effects are observed for adolescent use of alcohol.

52 Collins, D., & Cellucci, T. (1991). **Effects of school-based alcohol education program with a media prevention component.** *Psychological Reports, 69*(1), 191-197.

The effects of an alcohol education presentation with a media component of public service announcement were evaluated. The presentation was conducted over three (consecutive) days with 10th- and 11th-grade students in a rural area of South Carolina. The professionally-produced announcements focussed on drinking and driving. Fifty-two subjects were assigned by classrooms to either of two treatment groups or a control condition. Both treatment groups received the educational presentation but differed in that Group 2 was also exposed to the videotaped announcements. Effects of exposure were evaluated in separate measures of knowledge, attitudes, and alcohol involvement, using a pre- and post-test design, with a 1-month follow-up. Analysis did indicate an effect of over-all program on knowledge at follow-up, but none on attitudes or alcohol involvement. These findings and their implications are discussed in the context of previous evaluations of alcohol education programs and media efforts. See also Duryea (1992), listed in this bibliography.

53 Committee to Identify Research Opportunities in the Prevention and Treatment of Alcohol-related Problems: Institute of Medicine: National Academy of Science. (1992). **Prevention and treatment of alcohol related problems: Research opportunities.** *Journal of Studies on Alcohol, 53*(1), 5-16.

The major themes, conclusions, and recommendations are presented of a 2-year study conducted for the National Institute on Alcohol Abuse and Alcoholism by the Institute of Medicine. Research opportunities are identified that will improve knowledge about the prevention and treatment of alcohol problems. Among topics covered are: the social and personal aspects of alcohol-related problems toward which prevention efforts are directed; the features of a public health orientation which is most appropriate for the prevention task; individual vulnerability to alcohol misuse; and genetic, development and social learning perspectives on prevention. Treatment research is also discussed, covering the underlying philosophical issues as well as the formidable methodological problems in conducting treatment research. A broad review is given of promising treatment modalities and the research needed for developing effective patient-treatment matching schemes. It was concluded that cooperative multi-site research efforts are indispensable to the implementation of the research directions it recommends.

54 Conner, J. L., & Conner, C. N. (1992). **Expected benefits of alcohol use on sexual behavior: Native American adolescents.** *Psychological Reports, 70,* 91-98.

A study of self-reported drinking and beliefs about alcohol and sex was conducted, during an Intertribal Pow Wow, in 42 American Indian adolescents in attendance who volunteered for the survey. Those adolescents who reported heavy drinking during the pow wow were more likely to report the belief that drinking alcohol makes sexual experiences more enjoyable. Results are discussed in terms of the limitations of the study, the implications for increases in sexually transmitted diseases among this population, and the need to modify preventive efforts about "safe" sex.

55 Constantine, N., et al. ***Santa Clara County survey of drug, alcohol, and tobacco use among students in grades 5, 7, 9, 11.*** (184p). San Francisco, CA: Far West Laboratory for Educational Research and Development.

Findings are presented from the Santa Clara County (California) survey of alcohol and other drug use among students in grades 5, 7, 9, and 11, which was administered during the spring of 1991 to 5,180 students in 51 randomly selected county schools. Results show that reported alcohol and marijuana use levels were lower than those found in the most recent state survey for grades included in both surveys (grades 7, 9, and 11). For other illegal drug use, the findings discussed showed that the Santa Clara sample's reported use was slightly higher that the state's reported use; state rates were higher for grades 9 and 11. No county-state comparisons regarding tobacco use were possible. For grades 7, 9, and 11, strong relationships were noted among some environmental risk factor scales and drug use within the three main categories of tobacco, alcohol, and marijuana. Information on reliability and validity and on sampling error estimation methods are contained in a technical appendix. Survey forms and instruments, letters, pilot materials, administration instructions, scale definitions, and a list of participants are appended.

56 Daily, S. G. (1991). **Adventist adolescents and addiction: Substance use/abuse in an Adventist population and its relationship to religion, family, self-perception, and deviant behavior**. (Doctoral dissertation, United States International University, San Diego, CA). *Dissertation Abstracts International 52B*(6):3315-3316B.

The relative impact on Seventh-day Adventist adolescent substance use/abusers of four independent variables (religion, family, self-perception, and deviant behavior) was measured. Analysis was also made of how the Adventist teaching of total abstinence impacts substance use patterns among the Church's adolescents, and to compare these findings with parallel research conducted with adolescents in six other Protestant denominations, and in the general population. Subjects (N=13,818) were administered a 465-item questionnaire in carefully controlled group settings. For testing of hypotheses, substances abusers were defined as those who: smoked tobacco, or drank alcohol more than once a day, used illegal drugs more than once a week, used any of these substances 40 or more times in the last twelve months, or who engaged in binge drinking. As predicted, Adventist adolescents scored significantly lower on reported rates of substance use, and to a lesser degree on substance abuse, than adolescents in other Protestant churches. Deviant

behavior, religious orientation, family environment, and self-perception all proved to have strong correlations with Adventist adolescent substance use, with religion being even stronger than predicted, and self-perception being weaker than predicted. Contrary to prediction, Hispanic ethnicity was linked to higher reported rates of Adventist adolescent substance use, and geographical location did prove to be a significant factor correlating with varying levels of substance use. Also, contrary to prediction, abstainers scored significantly better than experimenters or moderate users on measures of religion, family, self-perception and deviance.

57 Dearing, B., Caston, R. J., & Babin, J. (1991). **The impact of a hospital-based educational program on adolescent attitudes toward drinking and driving.** *Journal of Drug Education, 21*(4), 349-359.

The High Risk Adolescent Trauma Prevention Program is situated in a teaching hospital setting, where adolescents who are considered to be high risk-takers tour a shock trauma unit. Typical participants had already received technical information in county programs about alcohol consumption and driving impairment. This program was aimed instead at changing attitudes by confronting participants with dramatic, real-life persons with injuries resulting from drunk driving and attendant long-term social and emotional consequences. Results from a pretest-posttest longitudinal evaluation design with 351 adolescents who participated in the program between December 1986 and July 1989, with follow-ups at three months, six months, and twelve months, showed the program to be highly successful. Marked changes were found in participants' attitudes toward driving after drinking, riding with someone who has been drinking, and preventing a friend from driving after drinking. These changes in attitudes were still evident, albeit with some decline in magnitude, after twelve months.

58 Dembo, R., Williams, L., Getreu, A., Genung, L., Schmeidler, J., Berry, E., Wish, E. D., & La Voie, L. (1991a). **A longitudinal study of the relationships among marijuana/hashish use, cocaine use and delinquency in a cohort of high risk youths.** *Journal of Drug Issues, 21*(2), 271-312.

Study of the relationship between drug use and crime over time remains an important topic in the field. Data from a longitudinal study of detained juveniles are examined to address this issue. Results indicate that self-reported delinquent behavior and alcohol use prior to initial interview were key predictors of reported delinquent behavior during the 10- to 15-month follow-up period. However, self-reported drug use and urinalysis test results (measured at initial interview), and prior delinquent behavior were significant predictors of the use of marijuana/hashish and cocaine over time. It is noted that very few of these youth received treatment for drug problems, and that some of those who sought treatment, were terminated from treatment programs, or were unable to enter programs, for lack of funds. It is concluded that society must reduce the pain of the troubled lives of high-risk youth, and that while such long-term efforts may incur sizable costs, they will be less than the burden of detention, commitment, and incarceration which will follow if not prevented. [Further results from the same study were reported in Dembo, Williams, Getreu, Genung, Schmeidler, Berry, Wish, & La Voie (1991b), and in Dembo, Williams, Schmeidler, Getreu, Berry, Genung, Wish, & Estrellita (1991), both listed in this bibliography.].

59 Dembo, R., Williams, L., Getreu, A., Genung, L., Schmeidler, J., Berry, E., Wish, E. D., & La Voie, L. (1991b). **Recidivism among high risk youths: Study of a cohort of juvenile detainees.** *International Journal of the Addictions, 26*(2), 121-177.

Some preliminary results are reported from an ongoing longitudinal study of 398 youths who entered a juvenile detention center in Tampa, Florida between December 1986 and April 1987. Analyses were directed toward determining whether the youth's alcohol or other drug use and their emotional/psychological problems at entry into the detention center predicted subsequent arrests for new offenses. Data is analyzed for the eighteen months following the initial interview. Statistically significant relationships were found between the youth's demographic characteristics (age, race, gender), referral history, reason for placement in the detention center, and cocaine use (as measured by urine analysis) and recidivism. However, the magnitudes of these relationships were low to moderate in value, suggesting that a longer follow-up period is needed to more meaningfully study this issue. [Data from the first fifteen months of this study were reported in Dembo, Williams, Getreu, Genung, Schmeidler, Berry, Wish, & La Voie (1991a), and further results from the same study were reported in Dembo, Williams, Schmeidler, Getreu, Berry, Genung, Wish, & Estrellita (1991), listed in this bibliography.].

60 Dembo, R., Williams, L., Schmeidler, J., Getreu, A., Berry, E., Genung, L., Wish, E. D., & Christensen, C. (1991). **Recidivism among high risk youths: A 2-1/2-year follow-up of a cohort of juvenile detainees.** *International Journal of the Addictions, 26*(11), 1197-1221.

A longitudinal study surveyed 398 youths who entered a juvenile detention center in Tampa, Florida, between December 1986 and April 1987. The analysis was directed toward determining whether the youths' alcohol or other drug use and their emotional/psychological problems at entry into the detention center predicted subsequent arrests for new offenses during the fourth and fifth six-month period following their initial interviews. Statistically significant relationships were found between the youths' demographic characteristics (age, race, gender), referral history, reason for detention in the placement center, cocaine use, and recidivism. The magnitude of these relationships increased with the length of the follow-up period. [Data from the first fifteen months of this study, and from the first eighteen months were reported in Dembo, Williams, Getreu, Genung, Schmeidler, Berry, Wish, & La Voie (1991a), and (1991b), respectively, both listed in this bibliography.].

61 Dielman, T. E., Butchart, A. T., Shope, J. T., & Miller, M. (1991). **Environmental correlates of adolescent substance use and misuse: Implications for prevention programs.** *International Journal of the Addictions, 25*(7A and 8A), 855-880.

A cross-sectional pilot study was conducted during the 1988-89 school year with 1,335 students in grades 6 through 12. The students were from junior high and high schools in one school district in Southeastern Michigan. The sample consisted of 49% girls and 51% boys. The sample was predominantly Caucasian (96.5%), and 19% were receiving the junior high school free and reduced lunch program. The measures employed in the study were selected on the studies of intrapersonal correlates of adolescent alcohol use and misuse. The students were asked questions regarding their alcohol use and misuse; several

intrapersonal variables including deviant self-image, family adjustment, school adjustment, and susceptibility to peer pressure, and their perceptions of parental norms, parental alcohol use, parental permissiveness, parental monitoring, parental nurturance, sibling norms, sibling alcohol use, peer norms, and peer alcohol use. The three predictors which stood out as most highly related to both alcohol use and misuse were peer alcohol use, peer norms regarding alcohol use, and susceptibility to peer pressure. These results, based on the analyses of the data from the total sample of 1,335 students, confirmed and extended the results of the earlier studies, indicating that peer alcohol use and peer norms regarding alcohol use, in combination with the intrapersonal construct of susceptibility to peer pressure, made the greatest contributions to the accountable criterion variance in adolescent alcohol use and misuse. After these three predictors were entered, some combination of parental monitoring, parental norms, parental nurturance, and sibling alcohol use provided statistically significant, but small additions to the accountable variance. The results of the research reviewed confirm the need to continue to focus prevention efforts on the reduction of conformity to deviant peer norms and pressures to use alcohol and other drugs.

62 DiFranza, J. R. (1992). **Preventing teenage tobacco addiction.** *Journal of Family Practice, 34*(6), 753-756.

A review of several studies shows that tobacco use remains a major health problem among children and adolescents. Restrictive school policies on tobacco use and enforcement of laws prohibiting the sale of tobacco to minors can produce substantial reductions in tobacco use among this population. Physicians are encouraged to get these policies implemented in their communities.

63 Donnermeyer, J. F., & Huang, T. C. (1991). **Age and alcohol, marijuana and hard drug use.** *Journal of Drug Education, 21*(3), 255-268.

Developmental theories of adolescent alcohol, marijuana, and hard drug use have emphasized the factor of age as an explanatory variable. However, studies have not attempted to examine the manner in which age interacts with other explanatory variables to predict usage. The interactive nature of age was examined in predicting alcohol, marijuana and drug use, based on a sample of 435 students from schools in a north-central county of Illinois. The results indicated statistically significant interaction terms for age with peer and social control factors for each type of usage. These findings suggested that many factors commonly associated with adolescent usage may be conditioned by age. It is recommended that additional research examine the interactive nature of age, as well as other factors, when testing theories of alcohol, marijuana, and other drug use among adolescents.

64 Downey, A. M. (1991). **Impact of drug abuse upon adolescent suicide.** *Omega: Journal of Death and Dying, 22*(4), 261-275.

Recent research on the association between drug abuse and self-destructive behavior among adolescents is reviewed. The results of epidemiological studies indicate that depressive syndromes, drug dependency, and alcoholism are frequently associated with self-destructive behavior among adolescents. The most frequently used substances by adolescents and adults in suicide attempts and completions in 1983 included alcohol combined with other drugs, diazepam, amitriptyline, aspirin, dipropoxyphene,

acetaminophen, and other tranquilizers. Drug ingestion has been reported to be the primary method used among adolescent suicide attempters. The typical youth suicide attempter is a mid-adolescent female who uses drugs in the attempt. Another study reports that adolescents who committed suicide were most likely to be older males with a current psychiatric disorder, usually an affective disorder, or alcohol or drug abuse. The suicide rate is 58 times higher among alcoholics than in the general population, and alcohol use has been found to be associated with 50% of suicides, and to increase the risk of suicidal behavior for both alcoholic and nonalcoholic populations. In addition, suicide has been reported as the cause of death for a significant percentage of alcoholics. The role of stressful events in adolescent suicides is also discussed.

65 Downs, W., & Rose, S. R. (1991). **The relationship of adolescent peer groups to the incidence of psychosocial problems.** *Adolescence, 26*(102), 473-492.

A treatment sample (n=127) and a control sample (n=114) of adolescents were used to investigate the relationship between adolescent peer groups and incidence of psychosocial problems. A content analysis resulted in four separate types of peer groups. The group with the lowest levels of involvement in school activities was labeled by other adolescents in negative terms. An analysis of variance indicated that the least involved and most negatively labeled group generally had the most positive attitudes toward alcohol and drug use, the lowest level of perceived harm due to alcohol and drug use, and the highest levels of alcohol abuse, drug use, delinquency, and depression. This group also had the lowest level of self-esteem, the most external locus of control, the least perceived access to occupational opportunities, and the highest level of societal estrangement. The results were interpreted as providing support for both control and labeling theories. It is concluded that the students in the low involvement group can benefit from programs targeted at increasing their involvement in school and moving them to another peer group, using control theory and labelling theory.

66 Duryea, E. J. (1992). **Psychometric and related deficits in preventive alcohol intervention programming.** *Psychological Reports, 70*, 333-334.

It is argued that the 1991 study by Collins & Cellucci ignored some important research principles needed for sound educational inquiry. Psychometric properties of evaluation instruments cannot be omitted from even field tests of small scale. Selected other omissions need review since other researchers may replicate such errors. [See Collins & Cellucci, 1991, in this bibliography.].

67 Dusenbury, L., & Botvin, G. J. (1992). **Substance abuse prevention: Competence enhancement and the development of positive life options.** *Journal of Addictive Diseases, 11*(3), 29-45.

Recent advances in the field of substance abuse prevention have derived from a consideration of the etiology of substance use and have also been solidly grounded in psychological theory. Evaluation studies of psychosocial prevention interventions have become increasingly rigorous, and clearly demonstrate that there are effective approaches to prevention. The Life Skills Training program is an example of a competence enhancement approach to substance abuse prevention. While research with this approach has

demonstrated its effectiveness at reducing substance use behavior, experience working with disadvantaged youth has suggested the need to broaden the concept of competence enhancement. Specifically, recommendations are made for formalizing the concept of positive life options as a potentially important component of substance abuse prevention.

68 Echterling, L., French, J. M., Wylie, M. L., & Gibbons, S. (1991). **A primary prevention program for teen alcohol abuse in a valley community**. In B. Forster, & J. C. Salloway (Eds.), *Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook* (pp. 65-77). (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen.

An overview is presented of a primary prevention program for alcohol abuse in the Shenandoah Valley of Western Virginia. Results are given of a needs-assessment survey and the development and implementation of the CASPAR curriculum. Needs assessment was performed on a sample of 650 local junior and senior high school students in May 1983, using the Student Alcohol Inventory. It is reported that the results showed significant levels of misinformation and problem-drinking behaviors. The goal of this curriculum was to educate young people in grades 3 to 12 (8 to 17 year olds) in making responsible decisions about alcohol use or non-use. Teachers, counselors, and administrators were trained to present this curriculum, and a program of high school peer counselors was developed. Students in grades 4-7 and 12 (n=825, 40% of total enrollment) received the full curriculum, and are reported to have enjoyed the program.

69 Eggert, L. L., & Herting, J. R. (1991). **Preventing teenage drug abuse: Exploratory effects of network social support.** *Youth & Society, 22*(4), 482-524.

A sample of 124 drug-using high school students considered at risk for school failure and continued drug use was enrolled in a drug abuse prevention program for high-risk youth—a daily interpersonal relations class—in a study intended to determine the effect of teacher and peer social support. This experimental group, and the control group of 140, were drawn from a list of high school students defined as high risk according to these criteria: previous drop-out status, teacher or counselor referral for known or suspected drug use, low GPA, deficits in earned credits toward graduation, and chronic truancy. The intervention students, at program exit, had decreased their use of drugs and had experienced fewer problems with friends and family and with school and other institutions. These results corroborate the findings of an earlier study on a smaller sample by the same primary investigator. A structural equation model is described, which was developed to explain how this intervention worked. It was found that teacher support had a significant effect in decreasing drug use, but while teacher support was found to increase peer support, peer support showed no influence in decreasing drug use or consequences—contrary to other studies which have shown peer support to decrease drug use. It was also found that those students with the greatest prior drug use, and the largest record of prior drug use consequences, received the most peer support. While the results indicated the program did decrease drug use, it had a much stronger effect on drug use consequences.

70 Ellickson, P. L., & Hays, R. D. (1991). **Antecedents of drinking among young adolescents with different alcohol use histories.** *Journal of Studies on Alcohol, 52*(5), 398-408.

Testing separate path analytic models for 7th-grade users and nonusers, the respective impacts of cognitive, social influence, and behavioral antecedents on adolescent drinking after 3 and 12 months were assessed in a sample of 1,966 students in the California control schools for the Project ALERT study. Among those students who had not tried alcohol by grade 7, it was found that social influence factors—exposure to peers who drink or use marijuana and to adults who drink—foster more frequent alcohol use and binge drinking in the near future (3 months later). The key peer influences on binge drinking were marijuana-specific. After 12 months, the child's own drinking experience during grade 7 and peer and parental attitudes toward drugs emerge as important explanatory variables. For children who had already started drinking by grade 7, cognitive—as well as social and behavioral—factors affect near- and longer-term alcohol involvement. While the child's prior drinking habits had the strongest impact, baseline expectations of using alcohol also predicted frequency of alcohol use and binge drinking after 3 and 12 months. Believing that alcohol use is harmful helped hold down increases in frequency of use (but not excessive use) as long as 12 months later. Engaging in deviant behavior or doing poorly in school did not predict future drinking among baseline nonusers, but did foretell which of the 7th-grade initiates were most likely to engage in binge drinking during grade 8. Social influences to use one particular drug were found to foster other drug use as well: it is suggested, therefore, that resistance skills taught for one particular drug will increase resistance ability in general. However, binge drinking was also fostered by other attributes (deviant behavior and poor academic performance) that are particularly resistant to short-term improvement programs and may require more concentrated efforts on at-risk youth. The results indicated that the paths to alcohol use and abuse are complex. Beliefs about drinking consequences and expectations of future drinking appear to affect later use only after drinking has started, providing concrete experience on which to base those cognitions. It is further suggested that prevention programs targeting a single risk factor are unlikely to have significant impact, and that what are needed are programs which address multiple risk factors.

71 Ellickson, P. L., & Hays, R. D. (1991). **Beliefs about resistance, self-efficacy, and drug prevalence: Do they really affect drug use?** *International Journal of the Addictions, 25*(11A), 1353-1378.

A structural equation model was used to examine social influence and cognitive precursors of adolescent drug use in a sample of 1,128 West Coast 8th-grade users and nonusers. For the 8th-grade nonusers of alcohol, cigarettes, and marijuana (n=518), low resistance self-efficacy and pro-drug social influences directly predicted generic expectations of using drugs and actual use nine months later. For the users (n=620), both variables directly affected expectations and indirectly affected actual use. While the latent variable measure of drug use prevalence did not predict either outcome, specific estimates of peer alcohol use directly affected later drinking. Estimates of several other drug-specific relations were required to fit the model, indicating that both general and drug-specific effects are needed to explain adolescent drug use.

72 Elmquist, D. L. (1991). **School-based alcohol and other drug prevention programs: Guidelines for the special educator.** *Intervention in School and Clinic, 27*(1), 10-19.

The primary approaches of programs to prevent alcohol and other drug abuse are reviewed, along with general problems of these programs. The literature shows that effectiveness of prevention programs is seldom evaluated, and that the limited research which is available presents a dismal picture. Key weaknesses of program evaluations are discussed, and suggestions and recommendations are made for special educators to implement prevention programs with their students with disabilities.

73 English, J., & McClure, M. (1991). ***Drug education through literature: An annotated bibliography for grades 7-12.*** Portland, OR: Western Regional Center for Drug-Free Schools and Communities.

Many people acknowledge that youth need to be educated so that they value healthy lifestyles and abstain from alcohol and other drug use. Literature particularly lends itself to these issues. In addition, language arts material and literature may specifically address issues of alcohol and other drug use by young people or their families and friends. This annotated bibliography lists some of these materials which might be used across the curriculum in grades 7 through 12. The materials are not intended as a substitute for a core health or drug prevention curriculum. Instead they provide some possible means by which there can be infusion of alcohol and other drug use prevention into other academic areas so that key concepts suggested in the core curriculum are reinforced. A literary work is included in the bibliography only if the main idea could be used to generate a discussion of alcohol and other drug use. The literature cited is categorized into four genres: fiction books; short stories; poetry; and nonfiction books. Grade levels are indicated for some works, denoting recommended age groups, not necessarily reading levels. Ideas are included for preparatory and follow-up activities.

74 English, J., Pyles, A. A., & Wicker, A. (1991). ***Drug education through literature: An annotated bibliography for grades K-6.*** Portland, OR: Western Regional Center for Drug-Free Schools and Communities.

Many people acknowledge that youth need to be educated so that they value healthy lifestyles and abstain from alcohol and other drug use. Literature particularly lends itself to these issues. In addition, language arts material and literature may specifically address issues of alcohol and other drug use by young people or their families and friends. This annotated bibliography lists some of these materials which might be used across the curriculum. The materials are not intended as a substitute for a core health or drug prevention curriculum. Instead they provide some possible means by which there can be infusion of alcohol and other drug use prevention into other academic areas so that key concepts suggested in the core curriculum are reinforced. A literary work is included in this bibliography only if the main idea could be used to generate a discussion of alcohol and other drug use. Fiction is divided into two sections: (1) grades kindergarten through 3rd grade and (2) 4th through 6th grades. The poetry section is divided into these categories: (1) drinkers and drinking; (2) humor and drinking; (3) drugs; (4) smoking; (5) and humor and smoking. Grade levels are indicated. Ideas are included for preparatory and follow-up activities.

75 Ertle, V., & Gabriel, R. M. (Compilers). (1991). ***Sharing your success: Summaries of successful programs and strategies supporting drug-free schools and communities.*** Portland, OR: Western Regional Center for Drug-Free Schools and Communities.

Many schools have identified successful strategies for prevention of drug abuse in attempting to make neighborhoods, schools, and communities healthier places to learn. One hundred and four summaries of these programs and practices are given in eight subject categories. First, peer programs describe a variety of ways in which young people help, comfort, empathize with, listen to, and support each other. Second, student assistance programs (including support groups, alternative classes, and adult mentoring programs) focus on not punishing but giving help to youth who may need extra support. Third, community partnerships have citizens join together to work on a process to solve common problems. Fourth, parent programs (family support) use various approaches to encourage parent and family participation. Fifth, comprehensive programs include policies that specifically address prevention and intervention activities rather than just discipline codes. Sixth, county and state initiatives make possible electronic networking, comprehensive parenting programs, regional collaboration, and the production of culturally appropriate materials. Examples of district-produced curriculum and staff development programs are provided in the seventh category. The eighth category includes special events and annual practices such as a drug-free day. Each program summary states its title, who to contact, the intended audience, an overview, and the components, including program description, community alliances, successful indicators, obstacles, and the key to success.

76 Evaluation and Training Institute. (1991). **DARE longitudinal evaluation annual report, 1987-88.** Report to the Subcommittee on Elementary, Secondary, and Vocational Education of the Committee on Education and Labor. House of Representatives. 101st Congress. 2nd Session. *Oversight Hearing on Drug Abuse Education Programs*, Vancouver, Washington, 1990, September 6 (80-87). Washington, DC: U.S. Government Printing Office. (GPO Serial No. 101-129.).

The analysis of student survey data showed statistically significant differences between DARE and non-DARE students in reported use of all categories of alcohol, tobacco, heroin, and inhalants. In all cases, the difference showed a lower rate of use for DARE students than for non-DARE students. Where differences were not statistically significant, numeric differences showed a consistently higher percentage of DARE students reporting no use of any included substances, and a consistently lower percentage of DARE students reporting use at each frequency level.

77 Feigelman, B., & Jaquith, P. (1992). **Adolescent drug treatment, a family affair: A community day center approach.** *Social Work in Health Care, 16*(3), 39-52.

A day care program for treating youth drug abuse is described. Day care treatment is situated in the middle, between outpatient care and the full-time alternatives such as residential therapeutic communities. Day care is structured to treat youth drug abuse as a family problem and requires behavioral change in all family members. Some social work interventions aimed at effecting family changes are outlined and illustrated. Follow-up research indicated that this approach is viable in treating youth drug abuse.

78 Feighery, E., Altman, D. G., & Shaffer, G. (1991). **The effects of combining education and enforcement to reduce tobacco sales to minors: A study of four Northern California communities.** *JAMA, 226*(22), 3168-3171.

To examine the effects of a community education and law enforcement intervention on illegal tobacco sales to minors, retail stores were studied over a 2-year period before and after the intervention. Implementation occurred in four suburban California communities with populations of 25,000 to 100,000. All the retail stores in one intervention community, and half the retail stores, randomly selected, in the other three intervention communities (n=169), were visited by minors aged 14 to 16 years, with the intent to purchase tobacco. Ongoing community and merchant education and four law enforcement operations were conducted. Among a cohort of stores visited by minors at the pretest (n=104) in June 1988, 71% sold tobacco over the counter and 92% sold tobacco through vending machines. At posttest 2 in May 1990, 24% sold tobacco over the counter and 93% sold tobacco through vending machines. Of the 31 stores issued citations, 16 were followed into the courts where the fines were dismissed or reduced. Education plus enforcement significantly decreased over-the-counter sales. Education alone had a limited effect on reducing illegal tobacco sales to minors. It did promote community support for more aggressive enforcement strategies. Vending machine sales were unaffected by these interventions. The lack of support at the judicial level may temper the effectiveness of enforcement. Legislative remedies addressing judicial obstacles and vending machine sales are needed.

79 Felts, W. M., Chenier, T., & Barnes, R. (1992). **Drug use and suicide ideation and behavior among North Carolina public school students.** *American Journal of Public Health, 82*(6), 870-872.

Data from 3,064 respondents to the 1990 North Carolina Youth Risk Behavior Survey were used to examine the relationship between adolescent drug use and suicide ideation and behavior. The Youth Risk Behavior Survey was administered during May 1990 to students in randomly selected classes in grades 9 through 12. Principal components analysis followed by Varimax rotation was performed separately on the drug use and suicide items. Correlation coefficients computed between the two sets of factor scores and comparison of mean drug use factor scores revealed that drug use, particularly of crack/cocaine, was related to increased suicide ideation and behavior.

80 Ferguson, A., & McKinlay, I. (1991). **Adolescent smoking.** *Child: Care, Health, and Development, 17*(3), 213-224.

Most smokers start experimenting with cigarettes in early adolescence. The factors which influence the development of the smoking habit are described, and methods of intervention, both in and out of the classroom, are discussed. Recommendations for further legislation and increased taxation are supported.

81 Fischhoff, B., & Quadrel, M. J. (1991). **Adolescent alcohol decisions.** *Alcohol Health & Research World, 15*(1), 43-51.

Decision theory suggests several general explanations of teenagers' drinking behavior. If teens are drinking in ways that are ill advised, it may be because they are not considering

options that would make it more attractive not to drink. Life-skills training programs attempt to create such options by teaching "refusal skills," socially adroit ways to avoid taking risks. Teens' drinking decisions might also be traced to their beliefs about the consequences of the options that they consider or to the tradeoffs that they are willing to make. Finally, adolescents may have difficulty making sense of complex decisions and keeping track of all the relevant considerations. As a result, they may resort to quick solutions reflecting only some of their personal beliefs and values. Decision theory has several potential pitfalls. One pitfall is assuming, without evidence, that teenagers (or adults) follow the model of optimal decision making (i.e., they always make the choice that is in their own self-defined best interests). A more subtle pitfall is assuming that the conceptual framework of decision theory is the one actually used by teenagers, even if they make suboptimal choices. A third pitfall is assuming that the model circumscribes all relevant dimensions of judgment and decision-making behavior, even though it ignores the roles of emotion. It is concluded that it will be hard to influence adolescent decision-making with programs that focus only on teaching "correct" processes and "correct" perceptions, while ignoring what teens actually do or can do.

82 Flynn, B. S., Worden, J. K., Secker-Walker, R. H., Badger, G. J., Geller, B. M., & Costanza, M. C. (1992). **Prevention of cigarette smoking through mass media intervention and school programs.** *American Journal of Public Health, 82*(6), 827-834.

The ability of mass media interventions to enhance the efficacy of school cigarette smoking prevention programs was tested over a 4-year period. Students in one pair of communities received media interventions and school programs that had common educational objectives, while students in a matched pair of communities received only the school programs; one pair was located in Vermont and central New York, and the other in Montana. The combined cohort of 5,458 students was surveyed at baseline in grades 4, 5, and 6 and was followed up annually for 4 years. Significant reductions in reported smoking, along with consistent effects on targeted mediating variables, were observed for the media-and-school group. For number of cigarettes smoked per week, the reduction was 41% (2.6 vs. 4.4); for smoking cigarettes yesterday, the reduction was 34% (8.6% vs. 13.1%); and for smoking in the past week, the reduction was 35% (12.8% vs. 19.8%). No effects were observed for substance use behaviors not targeted by the interventions. These results provided evidence that mass media interventions can be effective in preventing cigarette smoking when they are carefully targeted at high-risk youths and share educational objectives with school programs.

83 Forman, S. G., & Linney, J. A. (1991). **School-based social and personal coping skills training.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 263-282). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Researchers in the substance abuse area have noted that there is an association between the factors that underlie various types of substance use and other health-compromising behaviors, and therefore have contended that similar approaches may be effective in preventing various types of substance use. These programs teach adolescents personal and social skills in an attempt to counter one or more variables related to substance abuse, and are mostly based on social learning theory and problem behavior theory. These theories view substance use as a socially-learned behavior having both purpose and function, that is the result of both personal and social/environmental factors. A recent review of policy on

adolescent substance abuse prevention efforts questioned reliance on school-based programs. Important substance use variables may be influenced by schools, but major influences occur during the 18 hours per day spent away from school. In order to enhance the effects of coping skills training with respect to maintenance of effects on behavior and individuals most at risk for substance abuse, additional communication sources and settings should be explored. One such program, Project SCCOPE (the South Carolina Coping Skills Project) included parents as an additional communication source. However, the student outcomes from this intervention did not support the efficacy of this approach for high-risk adolescents. Alternatively, the mass media have been identified as major sources of influence for adolescents and television has been recognized as the most influential type of media. A number of attempts have been made to use television as a medium for adolescent substance abuse prevention. Unfortunately, most of these programs have not shown evidence of effectiveness. As with most of the early school-based interventions, the focus of the media effort has been on substance information, health appeals, and fear messages. Surprisingly, even the most recent media programs continue to focus on substance information and fear messages, although newer, more successful psychosocial approaches have been developed and shown to be more effective.

84 Forster, B., & Salloway, J. C. (Eds.). (1991). ***Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook***. (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen Press.

A socio-epidemiological perspective organizes information about substance-abuse prevention and treatment programs. This perspective focuses on the interrelationships of host, environment, and agent, viewed in six levels: cultural influences, social macro-structures, subcultural influences, social micro-structures, social-psychological factors, and substance characteristics. Articles in the book address the extent to which the socio-epidemiological theoretical model can direct prevention efforts, the extent to which prevention programs address causal factors identified in research, and the effectiveness of these prevention efforts. A topic matrix is provided. [Articles on prevention research and programs are listed separately in this bibliography: see V. Powers-Lagac; C. E. Miller; L. Echterling, J. M. French, M. L. Wylie, & S. Gibbons; and R. Granfield.].

85 Forster, J. L., Hourigan, M., & McGovern, P. (1992). **Availability of cigarettes to underage youth in three communities.** *Preventive Medicine, 21*, 320-328.

Underage youth have reported that they primarily obtain cigarettes from commercial sources. Thus policies that effectively prevent purchase by minors could have an effect on the prevalence of young people's cigarette use. In this study, 12- to 15-year-old male and female confederates attempted to purchase cigarettes from all cigarette outlets in three communities. A success rate of 53% over the counter and 79% from vending machines was achieved. These results show that minors can purchase cigarettes in all types of businesses, even those characterized as "adult" locations. Boys in this study had more difficulty than girls in purchasing cigarettes over the counter, and younger individuals had more difficulty than 15-year-olds. However, these differences were not found in vending machine sales. Similarly, over-the-counter sales of cigarettes were significantly reduced following a statewide increase in the penalty for tobacco sales to minors, but vending machine sales were not affected. The results supported stringent and universal controls over the sale of cigarettes as an essential part of any tobacco use prevention strategy.

86 Fox, H. B., Wicks, L. N., McManus, M. A., & Kelly, R. W. (1991). ***Medicaid financing for mental health and substance abuse services for children and adolescents.*** (Technical assistance publication series number 3: Financing subseries 1). Rockville, MD: Alcohol, Drug Abuse, and Mental Health Administration.

An explanation is provided of the basic structure of the federal Medicaid program and current information on the availability of Medicaid coverage for mental health and substance abuse prevention and treatment services across states. Special emphasis is placed on innovative approaches that either have been or could be used by states to improve Medicaid coverage of needed services. Data was taken primarily from a telephone survey of state Medicaid agency staff conducted in 1989. All state Medicaid survey data are current as of June 1989. Data from the March 1989 Current Population Survey are also used to estimate the number and characteristics of children with Medicaid coverage. The report also describes and evaluates the impact of changes in the federal Medicaid statute on state Medicaid coverage policies with respect to mental health and substance abuse services for children. In addition, the report focuses on the expanded benefits required as part of states' Early and Periodic Screening, Diagnosis, and Treatment program.

87 Foxcroft, D. R., & Lowe, G. (1991). **Adolescent drinking behaviour and family socialization factors: A meta-analysis.** *Journal of Adolescence, 14*(3), 255-73.

Family socialization processes are important influences on behavior in childhood and adolescence. Two major dimensions of family socialization are *support* and *control*, and these two dimensions were assessed for their influence on adolescent drinking behavior. Thirty recently published research studies, which reported the influence of (clearly identifiable) family socialization variables on (self-reported) adolescent drinking behavior were selected for analysis. The results of these studies were subjected to meta-analysis using a sorting technique. Variables were sorted along the dimensions of support and control, and along a *family structure* dimension, which measured parental intact-ness. Results of the meta-analysis indicated a clear negative linear relationship between support and adolescent drinking. There was also a negative linear relationship between control and drinking behavior. Thus low support and lax control were associated with increased drinking. However, there was some evidence of a possible curvilinear relationship between control and adolescent drinking. A negative relationship between family structure and adolescent drinking was also found, i.e. adolescents from non-intact families tend to drink more. The results were incorporated into a family systems perspective. It is suggested that extremes of support and control, when measured adequately, may be dysfunctional for adequate socialization into normal drinking behaviors, as defined by social and cultural norms, during adolescence.

88 Glassford, D., Ivanoff, J., Sinsky, A., & Pierce, W. (1991). **Student generated solutions to the alcohol/drug problem: A Wisconsin profile.** *Journal of Alcohol and Drug Education, 37*(1), 65-71.

Student perceptions regarding the credibility of alcohol and other drug abuse education and counseling programs may serve as a valuable tool in designing and evaluating such programs. In Wisconsin, 3,889 students in grades 6-12 were surveyed in order to generate a description of their preferences for such programs. The results were found to be similar throughout both the junior and senior high levels, with little difference noted between the

sexes, or by the type of institution attended (public or private), although there was no consensus on any characteristic of program. The most popular choice for an alcohol and other drug abuse counselor was a professional alcohol and other drug abuse counselor, preferred by 23% of respondents overall (28% of junior high students and 19%—second choice—of high school students). There was a high agreement (85%) in favor of the teaching of drug effects over not teaching them. Also, most students (64%) preferred a school assembly as the forum for alcohol and other drug abuse education (60% of males, and 67% of females). The preferences reported should be of assistance to schools, communities and auxiliary institutions in developing and evaluating their alcohol and other drug abuse programs.

89 Glynn, T. J., Anderson, D. M., & Schwarz, L. (1991). **Tobacco-use reduction among high-risk youth: Recommendations of a National Cancer Institute Expert Advisory Panel.** *Preventive Medicine, 20,* 279-291.

The National Cancer Institute's efforts to prevent tobacco-related cancers have resulted in numerous activities to reduce smoking prevalence throughout the United States. Two decades of research activity has provided much of the information needed for interventions through channels such as mass media, physician/dentist training, self-help strategies and school-based prevention programs. However, in the area of adolescent tobacco-use reduction, it has been consistently observed that youth who have the highest tobacco-use rates are among those least likely to be reached through school-based or other programs. Thus, these youth, often labeled "high-risk," are seen as a cornerstone for tobacco use prevention efforts. Although they pose a particularly difficult access problem, many valuable recommendations for strategies to identify and reach this group were made by a recent NCI-convened Expert Advisory Panel on the Prevention and Cessation of Tobacco Use by High-Risk Youth. The panel considered this issue from three perspectives-methods of identifying these youth, strategies for reaching them with appropriate tobacco use prevention/cessation programs, and identification of research needs. Their recommendations and conclusions are summarized in this article. Support for research addressing the prevention and cessation of tobacco use among high-risk youth is currently being considered by the NCI.

90 Granfield, R. (1991). **Converting the converted: Differentials in adolescent receptivity to alcohol education.** In B. Forster, & J. C. Salloway (Eds.), *Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook* (pp. 79-105). (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen.

A review of the literature on alcohol education programs reveals that these efforts have been relatively ineffective in preventing alcohol misuse. Evaluations of such programs have historically neglected to examine the conflicts between the normative messages of the program and the social situations of the students. There is an attempt to account for both the personal characteristics and the social circumstances which contribute to differentials in adolescent receptivity to alcohol-education. The questionnaire data are drawn from a sample of 202 high school students who participated in a six-week alcohol education program. Information on the students' views of the program and its messages, their drinking and drug-taking practices ad attitudes, the amount of substance use they attributed

to friends, and the degree of their attachment to parents was collected. Analysis suggests that receptivity to alcohol education is a multi-dimensional phenomenon based on an interaction between student behavior and attitudes about alcohol and drug use, perceptions of alcohol and drug usage among their friends, and their relationship with their parents. Implications for theory and policy are discussed which suggest that prevention measures should not use traditional didactic approaches which maximize aggregate level teaching and sanctioning.

91 Greenbaum, P. E., Prange, M. E., Friedman, R. M., & Silver, S. E. (1991, July). **Substance abuse prevalence and comorbidity with other psychiatric disorders among adolescents with severe emotional disturbances.** *Journal of American Academy of Child and Adolescent Psychiatry, 30*(4), 575-583.

Among 547 adolescents with serious emotional disturbances, ages 12 to 18, this study assessed prevalence of DSM-III substance use disorders, and comorbidity with DSM-III Axis I disorders. Factors of age, sex, state location, and type of treatment program also were examined. Overall prevalence rates were found as follows: alcohol disorder, mild/moderate abuse, 11%, severe abuse/dependency, 10.1%; marijuana disorder, mild/moderate abuse, 17.7%, severe abuse/dependency, 14.6%. Data were analyzed by logistic regression. The results of the study revealed that the following factors were associated with diagnoses of severe alcohol or marijuana abuse/dependence: residential mental health treatment program, conduct disorder diagnosis, depression diagnosis, states, age, and depression by facility interaction. It is concluded that substance use disorders are a major part of the clinical profile of many adolescents suffering serious emotional disturbances. This study was part of the National Adolescent and Child Treatment Study, a comprehensive 7-year longitudinal study.

92 Gregorius, H. H., & Smith, T. S. (1991). **The adolescent mentally ill chemical abuser: Special considerations in dual diagnosis.** *Journal of Adolescent Chemical Dependency, 1*(4), 79-113.

Chemical abuse in adolescence, in this object relations perspective, is predisposed by disintegration anxiety and by characteristic fears associated with status transitions. Severe manifestations of these anxieties and fears can also appear in the abuse of chemical substances and in psychiatric disorders. Because adolescence is a time of powerful external dependency (itself a function of incomplete psychological growth), the disease process associated with either chemical dependency or mental illness can be accelerated by the dynamics of the period. These dynamics are frequently controlled by sensitive dependence on such external sources as peer groups and by what are sometimes described in terms of the homeostasis processes of dysfunctional families. Dysfunctional families play into these dynamics in numerous ways—one way, for example, is by creating family crisis at the prospect of their adolescent children's growth and separation, which serve to convert their offspring into "problems" that then will serve the "family system" integratively. In general, such family "systems" discourage psychological growth by sustaining "enmeshment" of caregiving figures with their offspring. By contrast, external (nonfamily) adolescent milieus provide the adolescent with leverage against such dynamics as well as support in the face of isolation or repudiation. But since such external milieus are driven by conformist pressures, feed on separation-individuation anxieties, and enclose rebellious and delinquent activities, they often encourage experimentation with retreatist and disinhibiting substances. In turn, abuse of these substances both telescopes the disease

process connected with any underlying psychiatric problems and then superimposes on the signals of these illnesses additional chemically induced but transient symptoms.

93 Hansell, S., & White, H. R. (1991). **Adolescent drug use, psychological distress, and physical symptoms.** *Journal of Health and Social Behavior, 32*(3), 288-301.

The longitudinal interrelationships among general drug use, psychological distress, and physical symptoms were investigated in a three-wave panel study of a community sample of 1,380 New Jersey adolescents (90% White) interviewed when they were 12, 15, and 18 years of age—between 1979 and 1987. The results did not provide any support for the hypothesis that adolescents use drugs in general to cope with pre-existing psychological distress and physical symptoms. Rather, the results supported the hypothesis that general drug use contributes to physical and psychological impairments over time, although the magnitude of these results was modest. Nevertheless, such drug-induced psychological distress and physical symptoms only occurred in later adolescence: no evidence of impairments due to general drug use or specific alcohol use was found in early adolescence. The age difference may have been due partly to changes with age in level of use of alcohol, marijuana, and other drugs; and the relative increases in physical symptoms and psychological distress may have been due to general drug use between 15 and 18, or may have been due in part to the gradual development of impairment over time. Psychological distress and physical symptoms influenced each other over time, and physical symptoms partially mediated longitudinal changes in psychological distress. General drug use did not mediate any longitudinal changes in psychological distress and physical symptoms.

94 Hansen, W. B., & Graham, J. W. (1991). **Preventing alcohol, marijuana, and cigarette use among adolescents: Peer pressure resistance training versus establishing conservative norms.** *Preventive Medicine, 20*(3), 414-430.

Two strategies for preventing the onset of alcohol abuse, and marijuana and cigarette use were tested in junior high schools in Los Angeles and Orange Counties, California, as part of the Adolescent Alcohol Prevention Trial. The first strategy taught skills to resist peer pressure to use alcohol and other substances. The second strategy involved the correction of erroneous perceptions about prevalence and acceptability of alcohol use. Four experimental conditions were created by randomly assigning schools to receive: (1) neither of the experimental curricula (placebo comparison); (2) resistance skill training alone; (3) normative education alone; or (4) both resistance skill training and normative education. Students were pretested prior to the program and post-tested 1 year following delivery of the program. Study results revealed that a program designed to correct erroneous perceptions among students about the prevalence and acceptability of alcohol, marijuana, and cigarettes, significantly deterred the onset of use of these substance. In contrast, a program designed to teach 7th-grade students techniques to refuse offers to use substances had no discernible positive impact on substance use behavior. It is concluded that establishing conservative normative expectations and beliefs, effectively reduced the demand for substance use, and hence may be key to prevention of substance abuse in society.

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95 Hansen, W. B., Graham, J. W., Wolkenstein, B. H., & Rohrbach, L. A. (1991). **Program integrity as a moderator of prevention program effectiveness: Results for fifth-grade students in the Adolescent Alcohol Prevention Trial.** *Journal of Studies on Alcohol, 52*(6), 568-579.

Results are reported from a test of the quality of program delivery (program integrity) as a variable that may moderate the effectiveness of alcohol prevention programs. Two theory-based programs, Resistance Training and Normative Education, were delivered to 5th-grade students who were then tested on program relevant mediating variables. Resistance Training was found to improve students' knowledge of peer pressure resistance strategies, their performance on a behavioral assessment of peer pressure resistance skills and the manifestation of their future intentions to drink alcohol. Normative Education was found to improve students' perceptions of a conservative norm regarding alcohol use, facilitated their belief that refusing unwanted offers to drink alcohol could be easily accomplished and reduced their perceptions of the prevalence of alcohol use. Program integrity was measured by program specialists who taught the programs to students and by trained observers. Ratings of program integrity were found to significantly moderate outcomes for three of seven mediating variables. Affected were knowledge of peer pressure resistance strategies, behavioral pressure resistance skills and perceived self-efficacy. These results suggest that the quality of program delivery and reception may play an important moderating function on prevention program effectiveness.

96 Hawkins, J. D., Abbot, R., Catalano, R. F., & Gillmore, M. R. (1991). **Assessing effectiveness of drug abuse prevention: Implementation issues relevant to long-term effects.** In C. G. Leukefeld, & W. J. Bukoski (Eds.), *Drug abuse prevention intervention research: Methodological issues* (pp. 195-212). (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

The term "drug abuse" has been used to describe at least six empirically and conceptually distinct types of drug-related behavior, ranging from a single episode of substance use to repetitive pathological use over an extended period. Although the intervention effects on several indicators of these drug use outcomes have been investigated, little is known about the effect of drug abuse prevention interventions on patterns of pathological drug use that persist for longer than a month and cause social- or occupational-impaired functioning in the family, at school, or in a work setting. Virtually no prevention evaluations have followed participants for an extended period to assess long-term effects; yet it is only through long-term replication studies that the effects of drug abuse prevention interventions will be revealed.

97 Hawkins, J. D., Catalano, R. F., & Kent, L. A. (1991). **Combining broadcast media and parent education to prevent teenage drug abuse.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 283-294). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

In 1987, in collaboration with a Seattle television station, a television-assisted parent training campaign was designed and conducted, consisting of a one-hour prime-time

television special, and four 2-hour parenting workshops. The workshops were conducted at weekly intervals in 87 locations, and had been prepared from the "Preparing for the Drug (Free) Years" parenting curriculum, a risk-focused, workshop-format, skills training curriculum for parents of children 8-14, designed to generate motivation and behavioral skills to implement risk-reduction strategies in the family. The outcome actions sought were: (1) to establish a family policy on drugs on which all family members agree; (2) to teach the children social influence resistance skills to stay out of trouble while maintaining peer friendships; (3) to practice self-control skills to reduce family conflict; and (4) to create new opportunities for children entering adolescence to contribute and learn through active involvement in new roles in the family. This program was evaluated in 20 workshop sites, a sample stratified for urban, suburban, and rural locations. These results supported the combined use of broadcast media and parent skills training in a workshop format to reach and train relatively large numbers of parents to reduce drug abuse risk factors in their families. Both media and local school efforts contributed to recruitment success, suggesting that mass media may effectively reinforce and legitimate local site recruitment efforts, but should not be expected to replace local site recruitment activities. It is likely that the media's contribution was, as hypothesized, to create public awareness and acceptance for this parenting prevention campaign. The data also suggested that workshops led by trained volunteers were effective in generating significant knowledge, attitude, and behavior change in the majority of participants. Significant changes in participants' knowledge and attitudes regarding parenting practices to reduce drug abuse risk factors in the family were observed on 23 of 30 planned comparisons. All changes were in the desired direction. Moreover, a majority of participants reported conducting family meetings to set a family position on drugs and to teach their children refusal skills within the week following the introduction of that topic in the workshop.

98 Headen, S. W., Bauman, K. E., Deane, G. D., & Koch, G. G. (1991). **Are the correlates of cigarette smoking initiation different for Black and White adolescents?** *American Journal of Public Health, 81*(7), 854-858.

Studies of adolescents suggest that the causes of smoking initiation may differ for Blacks and Whites. Correlates of smoking initiation were examined among 1,227 nonsmokers, ages 12 to 14, who completed questionnaires in their homes. The analyses examined relationships between smoking initiation and 11 explanatory variables using logistic regression with the combined sample and with Black (n=391) and White samples. Over two years, 24% of Whites and 14% of Blacks started to smoke. Whites were more likely to start smoking at age 12 and Blacks at age 14, indicating that prevention efforts must be started in elementary schools for Whites, and continued into middle schools and junior high schools for Blacks. Having a best friend who smoked increased the odds of initiating smoking over two-fold for Whites but had no effect on the odds for Blacks. Whites initiated smoking earlier than Blacks and were more likely to be influenced by friends' behavior. These results would indicate that prevention programs focusing on peers might not be effective with Black adolescents. It must be noted that because Blacks comprised less than 32% of the sample these conclusions on ethnic differences may not be reliable.

99 Henggeler, S. W., Borduin, C. M., Melton, G. B., Mann, B. J., Smith, L. A., Hall, J. A., Cone, L., & Fucci, B. R. (1991). **Effects of multisystemic therapy on drug use and abuse in serious juvenile offenders: A progress report from two outcome studies.** *Family Dynamics of Addiction Quarterly, 1*(3), 40-51.

The effects of multisystemic therapy (MST) on drug use and abuse in serious juvenile offenders are discussed, with a focus on the treatment of antisocial behavior. MST is based on family systems conceptualizations of behavior and behavior change, that childrens' behavior problems may reflect dysfunctional family relations. The research data were obtained from two outcome studies, covering an average of four years post-treatment: the Missouri Delinquency Project involving 200 juvenile offenders, and the Family and Neighborhood Services project from South Carolina. Subjects from the Missouri treatment group had significantly lower rates of substance-related arrests post treatment than did the control group. Subjects from the South Carolina group had significantly lower self-reported drug use than did the corresponding control.

100 Hicks, G. F., Hicks, B. C., & Bodle, V. (1992). **Natural Helpers needs assessment and self-esteem: Pro-social foundation for adolescent substance abuse prevention and early intervention.** *Journal of Alcohol and Drug Education, 37*(2), 71-82.

The Natural Helpers program encourages pro-social peer support for coping with a broad spectrum of problems as an early intervention and prevention strategy for reducing adolescent substance abuse. an attempt is made to document and interpret the relationship between wanting help with self-esteem and other adolescent problems, including substance abuse, as measured through the Natural Helpers needs assessment process. Suggestions are presented as a means by which Natural Helpers can encourage functional, earned self-esteem, rather than the feel-good-now variety conducive to substance abuse.

101 Hillman, S. B., & Sawilowsky, S. S. (1991). **Maternal employment and early adolescent substance use.** *Adolescence, 26*(104), 829-837.

Research stimulated by increases in maternal employment has focused primarily on children, even though mothers of adolescents are more likely to be employed. It is adolescents who experience developmental changes that promote participation in adult behaviors in advance of their abilities. This study investigated the effects of maternal employment on the use of alcohol, cigarettes, marijuana, and other substances by early adolescents. A sample of 48 male and female 9th-grade students responded to a 48-item survey about their substance use behavior. Of the subjects, 23 came from two parent families in which both the mother and father worked full-time and 25 from families in which the father worked full-time and the mother worked part-time or not at all. A comparison of maternal employment patterns (full-time vs. part-time/not employed outside the home) indicated no significant differences in substance use behavior. Results supported the hypothesis that maternal employment has no harmful effects on adolescent adjustment and/or behavior.

102 Hingson, R., Heeren, T., Howland, J., & Winter, M. (1991). **Reduced BAC limits for young people (impact on night fatal crashes).** *Alcohol, Drugs and Driving, 7*(2), 117-127.

Since 1983, nine states have passed laws that lower the legal blood alcohol concentration (BAC) level for adolescent drivers below that legal for adults. This paper examines fatal crash data in the four states that passed laws before 1989 and have accrued sufficient data for evaluation. Adolescent and adult night fatal crash trends were compared in these states and four nearby states with similar drinking age laws, but which did not lower BAC levels for teen drivers. Equal numbers of years before and after passage of the law were examined in each of the four pairs of states. In the four states that lowered their BAC levels for teens there was a 34% decline after passage of the law in night fatal crashes among adolescents targeted by lower BAC levels. Among adults there was a 7% decline in night fatal crashes. In comparison states, there was a 26% decline in adolescent night fatal crashes and a 9% decline in adult night fatal crashes. While both groups of states showed large decreases in adolescent night fatal crashes, those that lowered their BAC levels for adolescents had significantly greater reductions than were observed in comparison states. This early evidence from the first four states to lower adolescent legal limits suggested this law may help to reduce adolescent involvement in alcohol-related fatal crashes.

103 Holtzman, D., Anderson, J. E., Kann, L., Arday, S. L., Truman, B. I., & Kolbe, L. J. (1991). **HIV instruction, HIV knowledge, and drug injection among high school students in the United States.** *American Journal of Public Health, 81*(12), 1596-1601.

To determine the prevalence of HIV-related drug behaviors among adolescents, and to assess the effects of HIV-related school-based instruction and HIV knowledge on these behaviors, data were analyzed from a 39-item, self-administered questionnaire completed by a probability sample of all students in grades 9 through 12 in the United States. Usable responses were obtained from 8,098 students. Of these, 2.7% (95% confidence interval [CI]=2.3-3.2) and 1.7% (95% CI=1.3-2.1) reported injecting illicit drugs ever and during the past year, respectively. Corresponding prevalences of needle sharing were 0.8% (95% CI=0.5-1.1) and 0.5% (95% CI=0.3-0.7). Regression analysis revealed that students with higher knowledge scores were less likely and males more likely to have ever injected drugs. HIV knowledge was similarly associated with other outcome measures of drug-injection behavior. Although HIV instruction did not directly influence drug-injection behavior independently of demographic characteristics, it was positively associated with HIV knowledge. While these results do not establish a causal relationship, they suggest that HIV knowledge and school-based instruction may play a role in maintaining low levels of drug-injection behavior among high school students.

104 Hughes, S. O., Power, T. G., & Francis, D. J. (1992). **Defining patterns of drinking in adolescence: A cluster analytic approach.** *Journal of Studies on Alcohol, 53*(1), 40-47.

Most empirical approaches to defining patterns of adolescent alcohol consumption focus on frequency of drunkenness. In an attempt to define patterns of drinking in a more comprehensive way, social context, as well as frequency and quantity of alcohol use, were assessed in a sample of 189 high school seniors (104 females and 85 males), who reported drinking alcohol in the previous year. Subjects' scores on frequency, quantity, and five social context variables were cluster-analyzed separately for males and females. Results

yielded four socially appropriate drinking patterns for both sexes: light drinkers, light party drinkers, and dating drinkers; and three problem drinking patterns (two for males and one for females): school drinkers and solitary/stranger drinkers for males, and solitary/school drinkers for females. These groups of subjects showed significant differences on reasons for drinking and on drinking consequences even after differences due to frequency and quantity were statistically controlled. These patterns reflect more than differences in the frequency and quantity of alcohol use alone. Although some of the more physiological aspects of alcohol consumption (e.g. blackouts) were closely related to frequency and quantity, the remaining reasons and consequences were not. Moreover, a group of "socially appropriate" drinkers (male family drinkers) showed relatively high levels of alcohol consumption without the corresponding reasons and consequences found in the problem groups. This suggests that future investigators should not rely on indices that weigh too heavily on frequency or quantity of consumption in defining adolescent problem drinking. The results suggest also that the label "problem drinker" might best be reserved for a relatively small percentage of adolescents.

105 Hunter, S. M., Vizelberg, I. A., & Berenson, G. S. (1991). **Identifying mechanisms of adoption of tobacco and alcohol use among youth: The Bogalusa heart study.** *Social Networks, 13*(1), 91-104.

The mechanisms of adoption of tobacco use, including smoking and smokeless tobacco use, and alcohol use by children are discussed. The research data included responses to a questionnaire given to 2,305 children, ranging in age from 8 to 17 years, living in the biracial community of Bogalusa, Louisiana. The results indicated that: (1) children who smoked had best friends who smoke; (2) children who drank formed drinking cliques; (3) tobacco and alcohol use spread by imitation of an admired peer's friends; and (4) smokeless tobacco was a less social activity than smoking tobacco. It is concluded that social influences played a significant role in the adoption of alcohol and tobacco use. These social influences should be considered when planning strategies for health education and prevention.

106 Jackson, M. S. (1992). **Drug use patterns among Black male juvenile delinquents.** *Journal of Alcohol and Drug Education, 37*(2), 64-70.

Patterns of drug use are described among Black juvenile delinquents in a large metropolitan area. A randomly selected sample of 248 incarcerated youths ranging in age from 12-20 years served as participants. Data indicated 90% of the participants had used some illicit mood altering substance, between 30% to 46% reported daily use, and the average age at initial use was approximately 12 years. Alcohol use tended to precede by about 5 months the use of other illicit substances. It is suggested that prevention efforts for this population must be directed at the elementary schools.

107 Jason, L. A., Ji, P. Y., Anes, M. D., & Birkhead, S. H. (1991). **Active enforcement of cigarette control laws in the prevention of cigarette sales to minors.** *JAMA, 266*(22), 3159-3161.

To assess the effect that cigarette legislation would have on reducing merchant sales rates of cigarettes to minors and the affect on adolescent smoking behavior, merchant selling behaviors and adolescent smoking habits were surveyed observationally before and after

passage of community antismoking legislation. The setting for the merchant survey was Woodridge, Illinois (population 25,200), a suburban community of Chicago. The surveys were distributed to adolescents in the local junior high school. Results were measured in the percentage of stores selling cigarettes to minors in Woodridge and in the percentage of students who had experimented with cigarettes or were regular smokers. Merchant sales rates to minors in Woodridge decreased from a baseline of 70% before legislation to less than 5% in 1.5 years of compliance checking after legislation. Student surveys showed that the rates of cigarette experimentation and regular use of cigarettes by adolescents were reduced by over 50%. It is concluded that cigarette control laws can be effective in significantly reducing the rate of cigarettes sold by merchants and rates of cigarette use by adolescents. Key elements of successful legislation implementation are consistent compliance checking and heightened community awareness of the problems and prevalence of adolescent smoking.

108 Johnson, J. L. (1991). **Forgotten no longer: An overview of research on children of chemically dependent parents.** In T. M. Rivinus (Ed.), *Children of chemically dependent parents* (pp. 29-54). New York: Brunner/Mazel Publishers.

Substantial research has linked the transmission of chemical dependence, especially alcoholism, to genetic and environmental risk factors, showing that children of chemically dependent parents are at high risk for substance abuse and other problem behaviors. Vigorous advocacy, special programs, workshops, and conferences promote the health and welfare of the offspring of chemically dependent parents in order to prevent and treat the many problems that they can encounter. Understanding the specific contributions of antecedent behaviors to the vulnerability for chemical dependence is an important research and clinical agenda. Through the early identification of biological, psychological, and environmental risk factors, we can advance our efforts toward the prevention of drug abuse. Studies determining the relative contributions of psychosocial and biological factors to chemical dependence can also aid efforts to develop specific prevention strategies that in turn, target the specific problems of different groups of children at risk. Research on children of alcoholics is examined separately from that on children of addict parents, revealing that comparatively little is known about the children of addict parents.

109 Johnson, V., & Pandina, R. J. (1991). **Familial and personal drinking histories and measures of competence in youth.** *Addictive Behaviors, 16*(6), 453-465.

Based on self-reported family histories, a sample of 1,270 New Jersey adolescents were categorized into one of three groups: (1) family history of alcoholism (FHA); (2) family history of heavy drinking (FHHD); and (3) family history symptom free (FHSF). These subjects were assessed on 26 measures tapping intra- and interpersonal competence at three points in time. Results of repeated measures (test time) ANOVAs revealed that FHA subjects (as compared to the two other groups) exhibited greatest levels of stress due to their inability to get along with others and the lowest level of attachment to their parents. Over the three test times, FHA subjects appeared to maintain an inappropriately low level of social orientation and display decreases in self-efficacy, goal-directedness, and the level of trust and respect for their parents. Children of heavy-drinking, nonalcoholic parents also exhibited low levels of school achievement motivation and social orientation. The alcohol/drug use pattern of the subjects was found to be associated with more measures of competence than was family drinking background. Examination of the relationship of

varying levels of substance use and competence measures by age group revealed that deficits are not static during the span of adolescence through young adulthood.

110 Johnston, L. D. (1991). **Contributions of drug epidemiology to the field of drug abuse prevention.** In C. G. Leukefeld, & W. J. Bukoski (Eds.), *Drug abuse prevention intervention research: Methodological issues* (pp. 57-80). (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

The interface between epidemiology and drug prevention always has been an extremely important one, and etiologic studies—insofar as they are any different from epidemiological studies—are important to both fields. The dichotomy between epidemiology and etiology is largely an artificial one, deriving from the medicalization of the field of social science research in the drug area and, thus, the arbitrary division into two discrete segments. There are few major epidemiological studies that do not speak to determinants of use as well as to quantification of use.

111 Johnston, L. D. (1991). **Toward a theory of drug epidemics.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 93-131). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

A theory is offered which is derived largely from the American drug epidemic since the 1960s and which accounts for both an overall epidemic and for changes in the use of specific drugs. Forces contributing to three general phases—expansion, maintenance, and decline—are described. A set of necessary conditions for expansion is postulated: awareness, access, motivation, reassurance and willingness to violate certain laws and predominant social mores. Four public social roles which help to bring about these conditions for various drugs are also postulated: the proponents, the reassurers, the public role models, and the antagonists. A number of forces are put forward to explain how the forward momentum of an epidemic continues, even beyond the point where some of the historical forces that gave rise to it (e.g., the Vietnam War) have ceased to exist. These forces include continued awareness of alternatives, continued access through a supply system that has become established and that seeks to perpetuate itself, and continual inter-cohort role modeling for younger adolescents by slightly older ones. Finally, it is argued that the decline phase for many drugs occurs as a result of users and potential users becoming increasingly aware of the hazards of use. This interpretation can be construed as a specific application of the Health Belief Model, which has been used to explain health-motivated behavior in a number of other domains. Three public social roles were posited as being important to bringing about such an increase in perceived risk: the knowledge providers, the educators, and the unfortunate public role models. It is argued that as perceived risk increases, use declines, as well as tolerance for use. It was pointed out that an increase in perceived risk cannot account for the decline in the use of all drugs, and also may not be enough to cause a decline in all subpopulations. In particular, a decline in motivation to achieve the effects obtained with CNS depressants is hypothesized as accounting for declines in the use of tranquilizers, barbiturates, methaqualone, and possibly heroin. Nevertheless, an increased concern about the dangers of use appears to have been a critical factor in the general decline of several very important drugs; in particular, marijuana, cocaine (crack cocaine specifically), LSD, and PCP.

112 Johnston, L. D., O. Malley, P. M., & Bachman, J. G. (1991). ***Drug use among American high school seniors, college students and young adults, 1975-1990: High school seniors.*** (DHHS Publication No. ADM 91-1813). Washington, DC: U.S. Government Printing Office.

Results are reported from the sixteenth national survey of American high school seniors and the eleventh national survey of American college students. Volume I deals with current prevalence of drug use among American high school seniors, and trends in use by seniors since the study began in 1975. Distinctions are made among important demographic subgroups in the population. Data are also provided on grade at first use, trends in use at lower grade levels, intensity of drug use, attitudes and beliefs among seniors concerning various types of drug use, and their perceptions of certain relevant aspects of the social environment. Trends in alcohol use indicated that alcohol consumption was almost universal among high school seniors (90% of seniors have tried it) and active use was widespread. Most important was the widespread occurrence of occasions of heavy drinking (32%; 5 or more drinks in a row at least once in the prior two-week period). Since 1980, the monthly prevalence of alcohol use among seniors has gradually declined from 72% in 1980 to 57% in 1990. Similar trends are observed in daily use and heavy drinking. Substantial gender difference was found in the prevalence of occasions of heavy drinking among high school seniors.

113 Jones, N. E., Pieper, C. F., & Robertson, L. S. (1992). **Effect of legal drinking age on fatal injuries of adolescents and young adults.** *American Journal of Public Health, 82*(1), 112-115.

A study was made of the effect of legal drinking age (LDA) on fatal injuries in persons aged 15 to 24 years in the United States between 1979 and 1984. Effects on pre-LDA teens, adolescents targeted by LDA, initiation at LDA, and post-LDA drinking experience were assessed. A higher LDA was also associated with reduced death rates for motor vehicle drivers, pedestrians, unintentional injuries excluding motor vehicle injuries, and suicide. An initiation effect on homicides was identified. Reductions in injury deaths related to drinking experience were not found. In general, a higher LDA reduced deaths among adolescents and young adults for various categories of violent death.

114 Kaminer, Y. (1992). **Psychoactive substance abuse and dependence as a risk factor in adolescent-attempted and -completed suicide: A review.** *American Journal on Addictions, 1*(1), 21-29.

Literature on the extent and nature of the association between suicidal behavior and substance abuse and/or substance dependence (SA-SD) among adolescents is reviewed. With the use of adult literature as a departure point, nosological issues regarding attempted and completed suicide and SA-SD diagnoses were reviewed. The epidemiology of the relevant variables of attempted and completed suicide were examined, and the nature of the relationship between attempted and completed suicide and SA-SD in adolescents was explored with a discussion of clinical and research implications of this relationship. It is concluded that regardless of the improvement in knowledge of specific risk factors, further research still needs to be done.

115 Kaminer, Y., Bukstein, O., & Tarter, R. (1991). **The Teen-Addiction Severity Index: Rationale and reliability.** *International Journal of the Addictions, 26*(2), 219-226.

There is an urgent need for a reliable method of evaluating the severity of adolescent chemical abuse and problems related to chemical abuse and to assess the need for treatment. The lack of an appropriate rating scale to fill this objective hampers the evaluation of objective treatment outcome and follow-up of adolescent chemical abusers. The Teen-Addiction Severity Index (T-ASI) is a structured interview which was developed to assess the seven following domains: chemical use, school status, employment-support status, family relationships, peer-social relationships, legal status, and psychiatric status. The instrument was administered by two experienced child psychiatrists to 25 adolescent patients at a 12-bed Pittsburgh, Pennsylvania, psychiatric clinic, consecutively admitted for substance abuse and concomitant psychiatric disorders. Scores from the two raters agreed very highly, indicating satisfactory inter-rater reliability of the rating scale. Its subscales provided information useful for tailoring treatment to the individual patient's needs.

116 Kaminer, Y., Tarter, R. E., Bukstein, O. G., & Kabene, M. (1992). **Adolescent substance abuse treatment: Staff, treatment completers', and noncompleters' perceptions of the value of treatment variables.** *American Journal on Addictions, 1*(2), 115-120.

The level of agreement is evaluated between unit staff and patients (including treatment completers and noncompleters) regarding their perception of the efficacy of treatment modalities in a program for adolescent substance abusers. The results indicate statistically significant and clinically meaningful differences in perception of the value of three modalities: (1) individual treatment contracting; (2) therapeutic community meeting; and (3) educational counseling. The three groups did not differ on seven other variables. It is hypothesized that the magnitude of agreement between staff and patients on the efficacy of treatment variables is associated with the likelihood of completing treatment among adolescent substance abusers.

117 Kandel, D. B., & Davies, M. (1991). **Decline in the use of illicit drugs by high school students in New York state: A comparison with national data.** *American Journal of Public Health, 81*(8), 1064-1067.

Results from a school-based survey administered to 7,611 adolescents in New York State indicated a decline in illicit drug use during the period 1983-88. The decline may be explained by a corresponding decline in the ratio of youths to adults, changes in peer influence, and differences between high and low drug use areas.

118 Kandel, D. B., & Davies, M. (1992). **Progression to regular marijuana involvement: Phenomenology and risk factors for near-daily use.** In M. Glantz, & R. Pickens (Eds.), *Vulnerability to drug abuse* (pp. 211-253). Washington, DC: American Psychological Association.

Data was taken from the New York State Follow-up Cohort, which was taken as representative of students enrolled in grades 10 and 11 in New York public high schools in 1971-1972. In 1984, structured personal interviews were conducted with 1,222 subjects, comprising 75% of the original sample. Use histories were taken for twelve drugs and drug categories. The data supported the conclusion that heavy drug involvement is a phenomenon of late adolescence and early adulthood. A surprisingly high proportion of those who ever experimented with marijuana went on to regular, almost daily use; however, most such users relinquished this pattern of use and shifted to more episodic consumption. Spells of near-daily marijuana use first occurred between ages 19 and 20 and lasted an average of over 3-1/2 years. The peak ages of involvement were consonant with epidemiological data on the age distribution of individuals in the general population who met criteria for substance abuse disorders. Near-daily marijuana users were for the most part involved in a pattern of multiple drug use in which marijuana was only one of the drugs that they experienced. The importance of early onset of marijuana use for subsequent escalation appeared to result from two processes. Young people who started using marijuana at an early age were at risk for onset of spells of near-daily use for a longer period of time. In addition, the risks for converting from any use to regular and frequent use were consistently higher among adolescents who initiated marijuana at a younger age, compared with those who initiated at a later age, for those ages that were directly comparable. In addition, the importance of familial factors was indicated by the finding that a family history of treated mental disorders and a paternal history of heavy drinking occurred more frequently among those youths who escalated than those who do not. Commitment to school appeared to be an especially important protective and restraining factor for escalation to regular and heavy marijuana use. Young people who performed well in school would have had more to lose, and, correlatively, those who perform poorly would have had less to lose, by becoming heavily involved in the use of illicit drugs. Working toward strengthening the educational system would have many beneficial effects, including a potential reduction in the number of youngsters who go on to abusing drugs. Ongoing studies may not be optimally sited to answer the question of substance-abuse vulnerability, for a number of reasons. The definition of substance abuse itself is ambiguous, as studies rely on quantity-frequency criteria, for which the correspondence with diagnostic criteria remains to be established. More psychometric work is required to establish such a correspondence. However, the data sets necessary to accomplish this task may not be available. Most important, most studies do not have the closely spaced longitudinal data that are required in young adulthood to measure certain vulnerability factors at the point at which the escalation to drug involvement takes place and the factors are operative. The difficulty is that different risk factors have different time lags. Furthermore, these lags remain to be specified. In the absence of precise knowledge, the best way to proceed may be to carry out longitudinal assessments at annual intervals, beginning in adolescence, prior to the risk for onset of illicit drug use, and persisting through early adulthood, the period of risk for escalation to abuse. Innovative research and sampling designs need to be developed to ensure a large enough number of cases for analysis.

119 Kaplan, H. B., & Fukurai, H. (1992). **Negative social sanctions, self-rejection, and drug use.** *Youth & Society, 23*(3), 275-298.

A sample of 1,925 usable questionnaires were obtained from subjects present for all three waves (1971, 1972, and 1973) of a longitudinal study, out of a population of 7,618 eligible grade 7 students (at the first wave) from the junior high schools of the Houston Independent School District. As expected from earlier theoretically informed analyses, drug use had only a modest effect on later drug use, most of the stability effect having been accounted for by the mediating effect of negative social sanctions. Negative social sanctions, as in earlier studies, had a direct effect on deviant peers, and disposition to deviance had a direct effect on drug use. The results supported the hypotheses: (1) that negative social sanctions evoked by earlier deviance effected a decrease in motivation to conform to social norms, and fostered motivation to deviate; and (2) that self-rejection, in response to negative social sanctions, lead to positive re-evaluation of deviant behavior, including drug abuse. Comparison of those subjects not available for the second and third waves with those who were indicated that attrition effects rendered the findings more conservative.

120 Kelleher, K. J., Rickert, V. I., Hardin, B. H., Pope, S. K., & Farmer, F. L. (1992). **Rurality and gender: Effects on early adolescent alcohol use.** *American Journal of Dependent Children, 146*, 317-322.

Previous studies of adolescent alcohol use have focused almost exclusively on urban and suburban youth, although alcohol is the most important drug of abuse among rural adolescents. The effects of rurality and gender on early adolescent alcohol use were studied among Arkansas students in grades 6-8, aged 11 to 14 years (N= 1,601), from urban, suburban, and two different rural areas (delta and highland). All subjects responded to a questionnaire designed to evaluate adolescent health behaviors, which asked about health-compromising behaviors, such as alcohol use. Significant findings included: (1) gender differences were not seen across areas; (2) parental behaviors, including smoking and drinking, did not differ across areas; (3) alcohol use, smoking, and use of smokeless tobacco products was reported by 38.5%, 21.9%, and 6.1%, respectively; (4) boys and girls in the rural delta area reported less frequent use of alcohol than adolescents from other areas; (5) boys in urban, suburban, and highland areas did not differ with respect to drinking patterns; and (6) girls in the highland rural area were less likely to report family-influenced alcohol consumption and more likely to report symptoms of alcohol abuse than girls from other areas.

121 Keller, M. B., Lavori, P. W., Beardslee, W., Wunder, J., Drs, D. L., & Hasin, D. (1992). **Clinical course and outcome of substance abuse disorders in adolescents.** *Journal of Substance Abuse Treatment, 9*, 9-14.

Seven percent (19 of 275) of children and adolescents not ascertained for seeking treatment received a DSM-III diagnosis of alcohol or drug use disorder. Their entire families were recruited into a research program designed to study the risk to offspring of parental psychopathology. The ages of those diagnosed were between 12 and 18 years. The drug and alcohol use disorders had a mean duration of 2 years, and the adolescents who remitted had a high likelihood of developing subsequent psychopathology. These adolescents also showed high rates of other psychiatric disorders. A high rate of alcoholism was found among their parents.

122 Klepp, K., Perry, C. L., & Jacobs, D. R. (1991). **Etiology of drinking and driving among adolescents: Implications for primary prevention.** *Health Education Quarterly, 18*(4), 415-427.

A prospective study was conducted to investigate what factors are predictive of self-reported drinking and driving (DD) among adolescents. Employing a theoretical framework taken from problem behavior theory, environmental, personality, and behavioral factors were tested for their value in predicting DD. A cohort of 1,482 students in grades 10 and 11 at three high schools in the Minneapolis-St. Paul area completed a written survey in Spring 1986 and again in Fall 1986. A psychosocial risk for DD score was computed from multiple regression analyses on the problem behavior measurements—this score was a predicted value for DD. The findings confirmed that problem behavior theory provides a useful framework for identifying etiological factors predictive of DD among adolescents. Identified personality, perceived environmental, behavioral, and demographic factors accounted for approximately 50% of the reported variance between predicted and actual DD at baseline. The same factors accounted for approximately 40% of the variance at follow-up DD and were predictive both among the students who did not drink and drive at baseline (incidence cases), and among those students who did drink and drive at baseline (continuation versus discontinuation of the behavior). Based on these etiological data, it is recommended that school-based, peer-led educational prevention programs be designed to reach young adolescents prior to the age at which a driver's license is obtained, and further that the programs be broad-based and consider DD within the larger context of drinking and driving related behaviors and traffic safety in general.

123 Knapp, J. E., Templer, D. I., Cannon, W. G., & Dobson, S. (1991). **Variables associated with success in an adolescent drug treatment program.** *Adolescence, 26*(102), 305-17.

Variables were investigated that predicted success in adolescent inpatient drug treatment program for 94 poly-drug abusers. Prognosis was based on Minnesota Multiphasic Personality Inventory (MMPI), Millon Adolescent Personality Inventory, Wechsler IQ, and historical variables. Favorable outcome associated with having fewer legal difficulties, fewer neurological risk factors, less pathological MMPI scores, higher Verbal IQ, lower Performance IQ, and being female.

124 Kokotailo, P. K., & Adger, H. J. (1991, March). **Substance use by pregnant adolescents.** *Clinics in Perinatology, 18*(1), 125-138.

The risk-taking behaviors of early sexual activity and substance use are associated and are part of a larger problem behavior constellation. Although substance use by adolescents and adolescent pregnancy have both been well documented and studied, substance use by pregnant adolescents is just beginning to be studied systemically. Current studies show significant substance use by pregnant adolescents. Suggested directions for future work in this area include changes in practice behavior by physicians and other health providers, and family education and support regarding sexuality and substance use. Further research is needed to determine prevalence of substance use among pregnant adolescents, how better screening and early intervention can be implemented, and what the long-term effects of substance use are on the adolescent and on her baby.

125 Kreutter, K. J., Gewirtz, H., Davenny, J. E., & Love, C. (1991). **Drug and alcohol prevention project for sixth graders: First-year findings.** *Adolescence, 26*(102), 287-293.

Data are presented from the first-year results of a three-year program evaluation for a drug and alcohol prevention project. The target group of 152 6th-graders in Connecticut parochial schools received instruction using Botvin's Life Skills Training curriculum. A control group of 64 additional subjects received no treatment. Both groups were tested before and after the eighteen-session program on the following variables: knowledge about and attitudes toward substances, self-concept, passivity, and locus of control. Results indicated that the program had a significant positive impact on the target's subject passivity, knowledge about drugs and alcohol, and self-image.

126 Kumpfer, K. L. (1991). **Children and adolescents and drug and alcohol abuse and addiction: Review of prevention strategies.** In N. S. Miller (Ed.), *Comprehensive handbook of drug and alcohol addiction* (pp. 1033-1060). New York: Marcel Dekker.

The public health services model of prevention is described, consisting of host, agency, and environmental factors. The model sees influences and prevention efforts as operating on the connection between two of these factors. School, community, family, multicomponent, and environmental programs are reviewed, with multicomponent programs seen to be most promising. It is suggested that, while there are almost no figures available on the cost-effectiveness of prevention efforts, the costs of dysfunctional users are so high that any effective program is likely to be cost-effective.

127 Labouvie, E. W., Pandina, R. J., & Johnson, V. (1991). **Developmental trajectories of substance use in adolescence: Differences and predictors.** *International Journal of Behavioral Development, 14*(3), 305-328.

A research sample including 409 New Jersey adolescents (205 males and 204 females) was initially tested at age 12, and retested at ages 15 and 18 for a longitudinal study of substance use in adolescence. The following results were seen: (1) 78.7% of adolescents exhibited a pattern of monotonically increased use; (2) 1.2% of adolescents exhibited a pattern of monotonically decreased use; (3) 13.2% of adolescents (36 females and 18 males) exhibited a non-monotonic pattern with a maximum at age 15; and (4) 6.9% of adolescents (16 females and 12 males) exhibited a non-monotonic pattern with a minimum at age 15. Overall, 95.8% of adolescents reported a net increase in use between ages 12 and 18. Both chronic differences and changes in risk factors were found to predict differences in use at ages 15 and 18. The strongest relationships for substance use were with changes in parental warmth and changes in personal satisfaction. Predictors included gender, parental and grandparental alcoholism, and self-esteem. Statistical analysis of the results is discussed in detail.

128 Lawson, A., & Lawson, G. (1991). **Classic articles in the field of family dynamics of addiction: The contemporary years, 1987-1990.** *Family Dynamics of Addiction Quarterly, 1*(4), 60-68.

Important contributions to the field of families and addictions published in the year 1987-1990 are presented in abstract form. The 23 abstracts presented cover the following topics: (1) couples at risk for transmission of alcoholism, protective influences; (2) female legacies, intergenerational themes and their treatment for women in alcoholic families; (3) variables associated with the adjustment of offspring of alcoholic fathers; (4) family structure; (5) psychopathology and substance use, in adolescence; (6) marital relationship of alcoholic, conflicted, and nonconflicted couples; (7) deliberate family process, a strategy for protecting children of alcoholics; (8) developmental stages in drug use, changing family involvement; and (9) alcoholic-spouse interaction as a function of alcoholism subtype and alcohol consumption interaction. Other abstracts present issues of parental alcoholism, childhood psychopathology, family therapy, alcoholism treatment, drinking patterns, divorce, incest, and marital rape.

129 Leigh, B. C., & Morrison, D. M. (1991). **Alcohol consumption and sexual risk-taking in adolescents.** *Alcohol Health & Research World, 15*(1), 59-63.

Considerable research has shown that the use of alcohol is correlated with early sexual activity, and a smaller body of work has suggested that the use of alcohol may be related to nonuse of contraception in adolescents. Much of this existing research is limited, in that some data come from small non-representative samples (such as groups of health clinic clients); specific contraceptive methods often are not distinguished; and cultural and ethnic differences have not been explored fully. Although researchers have shown an association between alcohol use and unprotected intercourse among adolescents, there is little evidence of a causal relationship between these activities. Identification of the cause of alcohol-related sexual risk-taking is an important step in identification of appropriate strategies for intervention. In some ways, the societal acceptance of alcohol as a sexual disinhibitor may hinder the progress and application of research: if drinking itself is assumed to cause high-risk sexual behavior, then other possible factors contributing to the relationship between alcohol use and sexual risk-taking may not be explored.

130 Leukefeld, C. G., & Bukoski, W. J. (1991). **Drug abuse prevention evaluation methodology: A bright future.** *Journal of Drug Education, 21*(3), 191-210.

Drug abuse prevention research findings have been inconsistent. These inconsistencies can be related to several issues including study design and methodology. Consensus recommendations to enhance drug abuse prevention evaluation research are presented, which were developed by a group of prevention researchers and practitioners who met at the National Institute on Drug Abuse during May 1989. As noted by the number of consensus statements, there was a high level of agreement. After exploring various aspects of evaluating prevention interventions, that agreement was reflected in specific recommendations which are directed to modifying prevention approaches; integrating epidemiologic, etiologic and intervention research methods; and expanding prevention research utilization.

131 Leukefeld, C. G., & Bukoski, W. J. (Eds.). (1991). ***Drug abuse prevention intervention research: Methodological issues.*** (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

Methodological issues in research into the prevention of drug abuse are reviewed, covering the documentation of the intervention, the measurement of the efficacy of the intervention, and assessing effectiveness. Leading researchers in prevention and prevention evaluation contributed essays to this volume. [Chapters listed separately in this bibliography were written by Bukoski; Clayton & Cattarello; Flay & Petraitis; Pentz & Trebow; and Hawkins, Abbott, Catalano, & Gillmore.]

132 Lewandowski, L. M., & Westman, A. S. (1991). **Drug use and its relation to high school students' activities.** *Psychological Reports, 68*(3), 363-367.

In a high school in a suburb of Detroit, students' attitudes toward, use, and money spent on drugs, as well as possible alternative activities, were investigated. The sample included 42 subjects (16 males and 26 females) enrolled in alternative education designed for students at risk for drug abuse, pregnancy, etc., who might attend college if guided carefully, and 65 regular students (42 boys and 23 girls) who were a mix of college and noncollege bound. The two groups did not differ in actual drug use, most likely because those who recommended students to the alternative education program used low grade point average and not drug use as criterion. Very few "hard" drugs were used. Most frequently used were readily available drugs such as alcohol. Use of a drug, spending money on it, or believing that it is all right for adolescents to use the drug did not automatically indicate frequent use of the drug. Contrary to adults' expectations, "hangin' out" with peers decreased use of "soft" drugs. Family activities for some involved the use of hard drugs together or the condoning of use. To create effective drug prevention programs, the effects of different activities need to be explored further, and admission criteria need to be well delineated.

133 Lignell, C., & Davidhizar, R. (1991). **Effect of drug and alcohol education on attitudes of high school students.** *Journal of Alcohol and Drug Education, 37*(1), 31-37.

The effects of a three-week alcohol and drug education course on attitudes and opinions about alcohol and drugs were evaluated for a sample high school students. The sample contained 180 grade 9 students from a high school with a student population of 928 (grades 9-12), in a Indiana town of 12,500 total population. The course evaluated was the 3-week alcohol and drug abuse portion of the required grade 9 health course. The mean attitude score for the sample changed in the desired direction after education—indicating negative feelings toward drugs and alcohol use and abuse, poly-drug use, dependency, social pressure, and media pressure and more positive feelings about legal restrictions and education. The fact that a change did occur in the desired direction supports the concept that such an educational program does have benefits in changing attitudes. It is noteworthy that the attitude scores did not change more dramatically from pre- to post-test. This suggests that attitude toward alcohol and drugs may be complex and stable and may require a more comprehensive intervention than a three-week educational course if a major change is to occur. An attitude is developed over time and is reinforced by many experiences. It should also be noted that not all the scores changed in a positive direction. This suggests

that not all students were active learning participants, that not all students took the testing seriously, or that for these students other factors than the course were stronger in affecting attitude.

134 London, W. M. (1991, May). **Learning about alcohol drinking attitudes and motivations by examining the vocabulary of drunkenness.** *Journal of Health Education, 22*(3), 195-196.

There are more synonyms in English, including slang terms, for the state intoxication than for any other concept. It is suggested that a classroom brainstorming session for some of these words can help students explore societal attitudes towards drinking. Terms can be grouped according to their connotations, such as destruction, silliness or amusement, self-impairment, etc.

135 Lorion, R. P., Bussell, D., & Goldberg, R. (1991). **Identification of youth at high risk for alcohol or other drug problems.** In E. N. Goplerud (Ed.), *Preventing adolescent drug use: From theory to practice* (pp. 53-89). (OSAP Prevention monograph 8). (DHHS Publication No. ADM 91-1725). Rockville, MD: U.S. Department of Health and Human Services.

Literature on identification of high-risk youth is reviewed, with a focus on identifying risk factors, and then identifying students showing those risk factors, with the aim of developing interventions targeted towards those high-risk youth.

136 MacKinnon, D. P., Johnson, C. A., Pentz, M. A., Dwyer, J. H., Hansen, W. B., Flay, B. R., & Wang, E. Y. (1991). **Mediating mechanisms in a school-based drug prevention program: First-year effects of the Midwestern Prevention Project.** *Health Psychology, 10*(3), 164-172.

The effects of a social-influences-based drug prevention program (the Midwestern Prevention Project) are described on the mediating variables it was designed to change. The process is also described by which the effects of mediating variables changed use of drugs (tobacco, alcohol, and marijuana). Students in 42 middle schools and junior high schools (grades 6 and 7) in Kansas City, Missouri, and Kansas City, Kansas, were measured in the fall of 1984 (n= 5,065) and again 1 year later (n= 5,008) after 24 of the schools had been through the program. Compared to students in control schools, students in program schools became less likely to express belief in the positive consequences of drug use, less likely to indicate that they would use such drugs in the future, more likely to report that their friends were less tolerant of drug use, and more likely to believe that they were better able to communicate with their friends about drug or school problems. Change in perceptions of friends' tolerance of drug use was the most substantial mediator of program effects on drug use. There was evidence that intentions to use and beliefs about the positive consequences of use may also mediate program effects on drug use.

137 Maltzman, I., & Schweiger, A. (1991). **Individual and family characteristics of middle class adolescents hospitalized for alcohol and other drug abuse.** *British Journal of Addiction, 86*(11), 1435-1447.

The frequency of alcohol and drug use, abuse and severity of dependence, and personality and family characteristics in 280 female and male hospitalized adolescents in treatment for chemical dependence and 120 middle class adolescents were examined. A MANOVA showed that parents' drug and alcohol use was a main effect, increasing frequency of use and severity of dependence upon alcohol and drugs in both groups of adolescents. Sexual and physical abuse studied in the patient group also functioned as a main effect. Patients reported significantly less family interest, and participation in intellectual, cultural and social activities, but more control than the comparison group. Female patients were more socialized, had lower self-esteem and more neuroticism than males. There was no gender difference in alcohol dependence or use, but there was significantly less dependence and use for other drugs in females than in males. It was concluded that adolescent alcohol and other drug abuse is part of a biopsychosocial syndrome of problem behavior, which includes the problem behavior of parents and the interacting family unit.

138 Marks, G., Graham, J. W., & Hansen, W. B. (1992). **Social projection and social conformity in adolescent alcohol use: A longitudinal analysis.** *Personality and Social Psychology Bulletin, 18*(1), 96-101.

Social projection is differentiated from social conformity as mechanisms underlying the false consensus effect in a longitudinal investigation in the context of adolescent alcohol use. Self-reported alcohol consumption and estimates of the prevalence of peer alcohol use were collected at two time points separated by approximately 1 year. Results indicated that conformity as well as social projection occurred in the sample of 378 7th- and 8th-grade boys and girls. With respect to conformity, regression analysis revealed that prevalence estimates at Time 1 predicted level of own use of alcohol at Time 2, after controlling for own use at Time 1. Similar results were obtained when onset of drinking was the critical measure. Social projection was demonstrated by the finding that level of own alcohol use at Time 1 predicted prevalence estimates at Time 2, after controlling for estimates at Time 1 Implications for research on the false consensus effect are discussed.

139 Marques, P. R., & McKnight, A. J. (1991). **Drug abuse risk among pregnant adolescents attending public health clinics.** *American Journal of Drug & Alcohol Abuse, 17*(4), 399-413.

The drug abuse risk status and characteristics of pregnant adolescents (aged 14-20) were evaluated at public maternal health clinics in Prince George's County, Maryland. During the project period, 403 young women were interviewed. Based on those interviews, one of four risk judgements, scaled for increasing severity of risk, was assigned. Twenty percent of the sample was found to be either at high risk or current abusers of alcohol or other drugs. Risk was equally represented across both the age range and marital status of the sample, but a higher percentage of Whites (30%) were categorized in the highest risk groups than Blacks (12%). These ethnic differences may relate to differences in family income or to differences in seeking and receiving pre-natal care. Post hoc examination of risk correlates identified drug use in the home and past or current cigarette smoking to be strongly predictive of risk. While parental drug use was the most frequently reported social environment drug influence factor, as risk status of the young women increased in severity,

the parental influence factor declined and the significant other influence factor increased. A separate sample of adult women (21 years and older) was interviewed for comparison to the youth sample.

140 McBride, A. A., Joe, G. W., & Simpson, D. D. (1991). **Predictions of long-term alcohol use, drug use, and criminality among inhalant users.** *Hispanic Journal of Behavioral Sciences, 13*(3), 315-323.

A 4-year follow-up study examined predictors of drug use and other deviant behaviors in 110 Mexican American adolescents of low socioeconomic status admitted to a drug abuse prevention program. The following hypotheses were examined: (1) positive family relationships are inversely related to adolescent deviant behaviors; (2) association with peers who engage in deviant activities is positively related to subsequent drug use and other deviant behavior; (3) satisfaction with school is inversely related to deviant activities; and (4) high self-esteem is negatively related to deviant activities. Results indicated that parental influences had only minor predictive power for outcomes at follow-up, while associations with deviant peers were strongly related to alcohol and drug use as well as involvement in criminal activities. Significant relationships were also found, especially in females, between low satisfaction with school and greater severity of drug use.

141 McKay, J. R., Murphy, R. T., McGuire, J., Rivinus, T. R., & Maisto, S. (1992). **Incarcerated adolescent's attributions for drug and alcohol use.** *Addictive Behaviors, 17*, 227-235.

Incarcerated adolescents' attributions for drug use were investigated. A new 50-item questionnaire, the Inventory of Drug Taking Situations (IDTS), was used to assess reasons for use. The IDTS yields eight subscales corresponding to risky situations identified by Marlatt and others. On the IDTS, subjects indicate how frequently they used their drug of choice when confronted with each risky situation. The IDTS scales had good internal consistency and higher scores were significantly associated with self-reports of drug use frequency. Furthermore, IDTS scores were most valid for the type of drug the measure was filled out about. Adolescents reported that they tended to use more frequently in response to positive and/or interpersonal experiences, as opposed to negative and/or internal ones. Positive, negative, interpersonal, and internal reasons for use were all equally correlated with frequency of use. In the most heavily drug-involved adolescents, however, negative reasons were more highly correlated with frequency of use than positive reasons. Treatment implications are discussed.

142 McKay, J. R., Murphy, R. T., Rivinus, T. R., & Maisto, S. (1991). **Family dysfunction and alcohol and drug use in adolescent psychiatric inpatients.** *Journal of American Academy of Child and Adolescent Psychiatry, 30*(6), 967-972.

The relationship between family functioning and substance abuse was examined in 45 adolescent psychiatric inpatients (16 male and 29 female). The adolescents, who had been hospitalized after acute psychiatric crises, provided reports of drug and alcohol use, intoxication-related problems, and family functioning (assessed with the Family Assessment Device), during the 4 months preceding hospitalization. Greater degrees of

family dysfunction in the areas of affective responsiveness and role functioning were associated with higher levels of substance abuse. When age, sex, and diagnosis were controlled for, family dysfunction in these areas was still significantly associated with alcohol consumption but not with drug use or intoxication-related problems. For these families, it may be particularly important to include family therapy when treating drug abusing adolescent psychiatric patients. More work is clearly needed to determine to what degree these areas of family dysfunction actually play a role in the cause and maintenance of substance abuse by this group of adolescents.

143 McMurran, M. (1991). **Young offenders and alcohol-related crime: What interventions will address the issues?** *Journal of Adolescence, 14*, 245-253.

Although most young offenders will grow out of both drinking and crime, interventions aimed at reducing crime through reducing drinking or reducing drinking so as to reduce health and social problems are important for some offenders. Where the aim is to reduce crime by reducing drinking, it is essential to assess carefully the relationship between the two in each person to ensure that this is logical. Since most adolescents drink, and since controlled drinking is achievable by younger people with fewer alcohol-related problems, moderation rather than abstinence is a realistic goal for most young offenders. Behavioral self-control training is one type of intervention which can effectively encourage moderate drinking, but this has to be conducted in ways that will engage young offenders' interest, for example, through self-help manuals, developing peer interventions and using simulated bar settings. In addressing the questions of which types of people commit which types of crime and what part alcohol plays in setting the conditions for crime to occur, studying the effects which young offenders expect from alcohol under various conditions may contribute to the development of cognition modification components of interventions and enable better matching of clients with programs.

144 Milin, R., Halikas, J. A., Meller, J. E., & Morse, C. (1991). **Psychopathology among substance-abusing juvenile offenders.** *Journal of American Academy of Child and Adolescent Psychiatry, 30*(4), 569-574.

The prevalence of substance abuse and coexisting DSM-III psychiatric disorders was evaluated in 111 juvenile offenders referred from the Milwaukee County Juvenile Court. Ninety (81%) of the subjects were diagnosed for substance abuse. As expected, a high rate of conduct disorder was present in both substance-abusing and non-substance-abusing juvenile offenders. The substance-abusing group had high rates of conduct disorder (91%), aggressive conduct disorder (68%), oppositional disorder (58%), as well as attention-deficit disorder (23%), and major depression (18%). Poly-drug abusers demonstrated significantly more aggressive conduct disorder and attention-deficit disorder than all other subjects combined. Excluding all conduct and oppositional disorder diagnoses, 39% of substance abusers versus 14% of the non-substance-abusers demonstrated comorbid psychiatric diagnoses. These findings suggest that careful psychiatric evaluation of juvenile substance abusers may be necessary to optimize treatment planning.

145 Miller, C. E. (1991). **The Matrix School Team approach to substance-abuse prevention.** In B. Forster, & J. C. Salloway (Eds.), *Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook* (pp. 43-63). (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen.

Prevention is an active process of creating conditions and promoting skills that encourage the well-being of people. Prevention is most effective when it involves a cross-section of people in a given community who participate and own their planned effort. The Matrix School Team approach is a prevention program that includes administrators, teachers, counselors, parents, and students together in a process which looks at school needs and plans for positive creative change within that environment. This approach is a long-term program as opposed to a short-term prevention approach. The Matrix School Team approach begins with the creation of a school team representing various levels of the school community. The newly-formed team then goes through an intensive five-day training where they learn prevention theory, prevention strategies, and how to form a team. Finally, they develop an action plan for change that will later be implemented in their school environment. The Matrix School Team approach is a model with results. Many schools in the United Sates experience problems related to the use of drugs and alcohol The Matrix School Team approach, a model which has its roots in the United States Department of Education Team Training, is a school-community approach to problem solving which will create positive conditions and promote a healthy school environment.

146 Miller, N. S., Mahler, J. C., & Gold, M. S. (1991). **Suicide risk associated with drug and alcohol dependence.** *Journal of Addictive Diseases, 10*(3), 49-61.

The association of alcohol and drugs with suicidal thinking and behavior is both causal and conductive. The subjective state of hopelessness is key to the disposition to actual suicides. Alcohol and drugs are influential in providing a feeling of hopelessness by their toxic effects, by possible manipulating of neurotransmitters responsible for the mood and judgement and by disruption of interpersonal interrelationships and social supports. The identification of alcohol and drug use and dependence is critical to the proper assessment of suicide. According to studies, over 50% of all suicides are associated alcohol and drug dependence and at least 25% of alcoholics and drug addicts commit suicide. Over 70% of adolescent suicides may be complicated by drug and alcohol use and dependence. Because alcoholism and drug addiction are leading risk factors for suicidal behavior and suicide, any alcoholic or drug addict should be assessed for suicide, especially if actively using alcohol or drugs.

147 Millstein, S. G., Irwin, C. E. J., Adler, N. E., Cohn, L. D., Kegeles, S. M., & Dolcini, M. M. (1992). **Health-risk behaviors and health concerns among young adolescents.** *Pediatrics, 89*(3), 422-428.

Health concerns and health-risk behaviors of young adolescents were studied in a research sample of 563 adolescents, ranging in age from 11 through 14, from an inner city public middle school, who responded to the Teen Health Risk Appraisal questionnaire in the spring of 1986. The following results were seen: (1) a majority of the students had tried alcohol and tobacco; (2) almost one third of the students had tried marijuana; (3) 21% of the students were sexually active; and (4) more than 75% had seen a physician during the prior year. It was concluded that young adolescents should be viewed as participants in the social

environment rather than as naive children. Physicians may play an important role as sources of information and positive role models.

148 Mirzaee, E., Kingery, P. M., Pruitt, B. E., Heuberger, G., & Hurley, R. S. (1991). **Sources of drug information among adolescent students.** *Journal of Drug Education, 21*(2), 95-106.

A sample of 1,023 students in grades 8 and 10 in small- to medium-sized central Texas school districts was assessed to determine the amount of information they had received from ten sources about six categories of drugs. The amount of information males reported receiving about each drug category was significantly greater than what females reported, and the amount of information that 8th-graders reported receiving about each drug category was significantly greater than what 10th-graders reported. Television was the primary source of drug information for all categories except inhalants, for which friends and television were equally important sources. Parents and printed media were of secondary importance, followed by friends and teachers. Adolescents were less likely to receive drug-related information from experience, siblings, church, doctors, and police. The reliance on the mass media for drug information in smaller school districts is a pattern which has been previously observed in larger urban districts. This consistency suggests that mass media approaches to drug education are likely to be as effective in rural areas and smaller towns as they are among urban adolescents. In light of the power of television, professionals involved in drug education should put television to better use, and the various agencies concerned with drug education should coordinate their efforts in its utilization. It is suggested that educators have a responsibility to work for the removal of advertisements and programming which have the potential for negatively affecting the drug use behavior of teenagers.

149 Mitchell, J. E., Pyle, R. L., Eckert, E. D., & Specker, S. (1991). **Eating disorders and drug and alcohol addiction.** In N. S. Miller (Ed.), *Comprehensive handbook of drug and alcohol addiction* (pp. 193-202). New York: Marcel Dekker. The risk for alcohol/drug addiction problems among patients with eating disorders appears to be increased compared to the general population, as does the risk for eating disorders among women with drug and alcohol problems. Several studies have indicated elevated rates of bulimia and anorexia nervosa among women diagnosed for chemical dependency, while others have found elevated rates of chemical dependency among patients diagnosed with bulimia and anorexia nervosa.

150 Moberg, D., & Hahn, L. (1991). **The Adolescent Drug Involvement Scale.** *Journal of Adolescent Chemical Dependency, 2*(1), 75-88.

The Adolescent Drug Involvement Scale (ADIS) was developed as a research and evaluation tool to measure level of drug involvement in adolescents. The scale is an adaptation of Mayer and Filstead's Adolescent Alcohol Involvement Scale. For purposes of interpretation, drug involvement is considered as a continuum ranging from no use to severe dependence. The ADIS was administered to 453 adolescents upon referral to three programs: a brief intervention/diversion program, a rural outpatient program stressing one-to-one counseling, and an urban outpatient program taking a family systems approach to treatment. Results indicated acceptable internal consistency and provide preliminary evidence of validity. ADIS scores correlated highly with self-reported levels of drug use, with subjects' perceptions of the severity of their own drug use problem, and with clinical

assessments. The scale thus showed promise as a research and brief screening instrument, going beyond measuring only use patterns in order to assess severity of drug involvement. Limitations included the scale's construction as a uni-dimensional operational measure not tied to a specific set of assessment criteria, the demographic characteristics of the validation sample (White Wisconsin adolescents from small cities and rural areas), and the lack of data regarding youth drawn at random rather than from intervention/treatment populations.

151 Monahan, M. A. (1991). **"I was always too busy, am I too late"? A parental plea. A program to increase parent participation in drug education prevention programs and activities**. (M.S. Practicum Report, Nova University, Fort Lauderdale, FL).

The lack of parent involvement in an elementary school's parent drug education programs and related activities was addressed by the implementation of specific strategies. Objectives included an increase in parent attendance at such programs and in completed and returned parent drug education homework assignments. Students were involved in advertising the programs and in the writing of personal invitations for them. Parent volunteers assisted by making reminder phone calls to parents and by providing incentives to students whose parents were involved. Attendance sheets of parents attending drug education programs and the number of completed and returned parent homework assignments before strategies were implemented were compared to those after implementation. The results indicated increases in both parent attendance in drug education programs and in completed and returned parent homework assignments. Participation in the Drug Education Night for parents increased from 12 to 197 and participation in the Choices and Challenges Parent Drug Education Programs increased from 6 to 16. Parent homework assignments increased from between 32% and 43% to between 64% and 100%.

152 Moncher, M. S., Holden, G. W., & Schinke, S. P. (1991). **Psychosocial correlates of adolescent substance use: A review of current etiological constructs**. *International Journal of the Addictions*, *26*(4), 377-414.

Psychosocial correlates of adolescent substance use are reviewed, focusing on recent empirical literature. Using a tabular format, an attempt is made to provide a facile tool for referencing the literature. Examination of the literature reveals considerable diversity among explanations regarding the variance explained by many of the correlates studied. While the field strives toward a consistent theoretical base from which effective interventions may be developed, researchers must specify the nature of their study populations, designs, methodological approaches, and any issues of generalizability. Only in this way will inconsistencies in study findings be reconciled and progress toward culturally specific intervention techniques be furthered.

153 Moore, J., Sandau-Christopher, D., Sadler, J., Davis, G., Grosko, J., Mudd, I., Dunn, T., Jordan, A., Owens-Nausler, J., Grenert, B., Blair, B., Sheffield, A., Hunt, P., Reynolds, J., Ruzicka, P., Sutter, M., Fraser, J., Carr, M., Word, E., Lacy, L., Zedosky, L., Nehls-Lowe, B., Scalise, D., Gay, A. N., Chioda, D., Simpson, P., & Blanken, A. (1991, September 27). **Current tobacco, alcohol, marijuana, and cocaine use among high school students: United States, 1990.** *MMWR: Morbidity and Mortality Weekly Report, 40*(38), 659-663.

Patterns of tobacco, alcohol, marijuana, and cocaine use among high school students in the United States are discussed and selected data reported on current use of these substances among students in grades 9-12 from two components of the Youth Risk Behavior Surveillance System, including a national survey using a probability sample of 11,631 students. The following median results for the 30 days preceding the survey were seen and are presented in tabular form: (1) 31% reported smoking at least one cigarette; (2) 11% reported using smokeless tobacco; (3) 54% reported having at least one alcoholic drink; (4) 35% reported having five or more drinks on one occasion; (5) 12% reported using marijuana at least once; and (6) 2% reported using some form of cocaine, including crack, at least once. The median prevalence estimates were similar to the national prevalence estimates. An editorial note stresses that increased prevention efforts are needed.

154 Myers, P. L. (1991). **Cult and cult-like pathways out of adolescent addiction.** *Journal of Adolescent Chemical Dependency, 1*(4), 115-137.

Historically, many individuals have sought a path out of pain and confusion within a smaller, structured alternative to society. One subset is made up of youths suffering from conditions such as a stalled adolescence, chemical dependency, or isolation. Some of these opt to join unconventional groups commonly termed cult or sect, and experience their membership as highly rewarding in the short term. However, such groups may not provide what is sufficient either for meaningful recovery from addiction, or for resolution of developmental issues. Moreover, when membership comes to an end, problems of societal and family reentry are immense.

155 Nakken, J. M. (1991). **Issues in adolescent chemical dependency assessment.** *Journal of Adolescent Chemical Dependency, 1*(3), 77-99.

The treatment of chemical dependency in adolescents has grown tremendously in recent years, despite an apparent leveling off of daily chemical use patterns in this age group. There are two obvious reasons for this popularity: one is that treatment works, perhaps more dramatically than other kind of intervention. In response to the "miracle cure," excitement spreads through the community of parents and kid-helping professionals, and more youth are referred for chemical dependency treatment, sometimes at early stages of chemical involvement. Demand for treatment beds grows. A second reason for the growth of treatment is that many health care organizations view adolescent treatment programs as an answer to financial difficulty. Some adolescent treatment providers are warehousing kids at the request of their parents or the courts, sometimes in locked units, without recourse nor protection for their civil rights. While some of these questions related to the care provided to adolescents in treatment (such as placement in locked treatment units without benefit of a court hearing, refusal to allow parents to communicate with a child in

treatment, and use of personally degrading "treatment methods" such as the wearing of self-derogatory signs and shaving of heads), the critical charges most often raised concern inadequate assessment and inappropriate admission practices. A key operating principle is that assessment is a process. Explained that way to a family, they can often see that there are intermediate steps for change that are appropriate. Whether an adolescent is admitted for treatment, referred elsewhere, or refuses treatment, it is useful for the family to see the current situation as part of a process in which options will remain open as the situation changes.

156 Nalty, D. F. (1991). ***Facts, issues and trends on alcohol and other drug abuse in South Carolina***. Charleston, SC: South Carolina Commission on Alcohol and Drug Abuse.

Current information on alcohol and other drug abuse in South Carolina is presented. The report provides most information in tables, and areas covered include: (1) South Carolina's alcohol and drug abuse system; (2) total pure alcohol consumption, per capita, age 18 and older; (3) cocaine use in the last 30 days by high school seniors, Southern region; (4) percent of adult population who were drinkers; (5) youth drug use, by grade; (6) marijuana use, perceived risk and availability to high school seniors, United States; (7) alcohol and other drug arrests, 1990; (8) driving under the influence (DUI) arrests, 1979-1990; (9) effect of raising the drinking age on alcohol-related car crashes involving 18-29 year-olds; (10) crimes committed under the influence of drugs, prison survey, United States, 1986; (11) total number of clients receiving services from South Carolina Alcohol and Drug Abuse system; (12) infants exposed to drugs each year; (13) causes of death among South Carolinians, selected categories; (14) impact of alcoholism on families, United States, 1991; (15) economic costs of alcohol and other drug abuse in South Carolina, 1990; and (16) the most effective approach to combat drug abuse.

157 National Institute on Drug Abuse. (1991). ***Drug use among youth: Findings from the 1988 National Household Survey on Drug Abuse***. (DHHS Publication No. ADM 91-1765). Washington, DC: U.S. Government Printing Office.

Data are presented on the prevalence and trends in use, correlates of use, patterns of use, and problems associated with use of illicit drugs, alcohol, and tobacco among youth aged 12 to 17 in the United States. Most data are drawn from the 1988 National Household Survey on Drug Abuse (NHSDA), although data concerning trends are drawn from NHSDA surveys conducted from 1972 to 1985. The prevalence of drug use among youth decreased during the 1980s, but many youth reported use of illicit drugs, alcohol and cigarettes and experienced problems with their use. In 1988, one-fourth reported they had used one or more illicit drugs in their lifetimes, one-half had used alcohol, and more than 40% had used cigarettes. Drug use increased with age and some differences in drug use among demographic groups were found. Males were more likely than females to report current alcohol use; Whites were more likely than Blacks and Hispanics to be current users of most drugs. Most youth who had used marijuana, cocaine, or alcohol in the past month reported that they were infrequent users. However, approximately 3.4% of youth drank alcohol on more than 5 days in the past month, and about 2% smoked a pack or more of cigarettes a day in the past month. Approximately 15% of the youth reported problems in the past year resulting from the use of alcohol, drugs, and cigarettes.

158 National Institute on Drug Abuse. (1991). ***National Household Survey on Drug Abuse: Main findings 1990***. (DHHS Publication No. ADM 91-1788). Washington, DC: U.S. Government Printing Office.

The 10th study in a series of national surveys measured the prevalence of drug use among the American household population aged 12 and over. Drug use prevalence was estimated for the civilian and noninstitutionalized population of the United States. Population estimates are presented separately for the total population and for Whites, Hispanics, and Blacks. For each drug there are eight tables which are arranged to facilitate group comparisons. The data for the total population are presented by sex for each of the four age groups. Data in the remaining seven tables for each racial or regional category are presented first by age, then by sex, and finally for the total population in that racial or regional category. A prevalence section presents data for the illicit or nonmedical use of any drug, and for prevalence of the individual licit and illicit drugs, with separate data for the prevalence of phenocyclidine (PCP), heroin, cocaine and amphetamine use. The frequency and regularity of drug use during the past year are reported. Information is provided on the frequency of use in the past year for marijuana, cocaine, and alcohol.

159 National Institute on Drug Abuse. (1991). ***National Household Survey on Drug Abuse: Population estimates 1991***. (DHHS Publication No. ADM 92-1887). Washington, DC: U.S. Government Printing Office.

Data is presented from a national survey sponsored by the National Institute on Drug Abuse, representing estimate drug use prevalence for the civilian, non-institutionalized population of the United States, aged 12 and over.

160 Nevada Department of Education. (1992, January). ***A survey of alcohol and other drug use among Nevada students***. Carson City, NV: Nevada Department of Education.

In the fall of 1991, the Nevada Department of Education conducted its second biennial survey to assess drug and alcohol attitudes and use among students in grades 6, 8, 10, and 12. Some comparison was made to data from the first survey in 1989. The statewide survey was administered to a random sample of classes, rather than a random sample of students, in order to minimize disruptions to the school routine. Results indicated that alcohol was the major drug of choice for students at all grade levels in Nevada. Even at grade 6, 42.9% of students reported having consumed beer, wine, or hard liquor at least once in their lifetime. This figure climbed to 66.3% by grade 8, to 81.4% by grade 10, and reaches 83.6% by grade 12. From 1989 to 1991, the percentage of students currently using alcohol declined at every grade level surveyed. Self-reported use of three specific forms of alcohol (beer, wine, and hard liquor) was also down at all four grade levels since 1989, with the largest decline in grade 12, and the smallest in grade 10. Compared to the 1989 survey, more students at all grade levels reported having had their first drink at a later age. Approximately 15% of students in grade 6, and over 50% of those in grade 12 reported at least experimental use of tobacco. Nevada students' use of marijuana and cocaine was relatively low and had decreased at all grade levels since the 1989 survey. A tendency appeared among students at all four grade levels to attribute more alcohol and drug use to their friends than they reported for themselves. Friends became the primary source of alcohol and an increasingly greater source of information about drinking and drugs for students in grades 10 and 12. For the same grades, approximately three-fourths

of students reported believing that students use alcohol and drugs on their campus during the school day. But the percentage of students reporting that students used alcohol or drugs on their campus had declined at every grade level since the 1989 survey. Self-reported use of alcohol, tobacco, and other drugs during the school day had declined slightly in grade 10, more substantially in grade 12. More students identified school as their source of most learning about the dangers of drugs and drinking since the last survey. Almost 1 in every 5 students reported living with someone with a drinking or drug problem. Most 6th-graders who drank reported getting their alcoholic beverages from home, most frequently with parental knowledge. Students saw their parents as disapproving of marijuana use and regular or heavy drinking, but as more lenient regarding their attending private parties where alcohol is available. Parental attitudes toward substance use (as perceived by students) had varied little since the 1989 survey. Tenth-graders saw their parents as being slightly more permissive about marijuana use, heavy drinking, and attendance at parties where drinks are available; while 12th-graders perceived somewhat more permissive attitudes toward regular drinking, but less permissive ones toward heavy drinking and attendance at parties where alcoholic beverages are available. Approximately three-fourths of high school students reported that they attended parties in the community where there is drinking or drug use, but these percentages had declined at all four grade levels, compared to 1989, with the greatest decline again in grade 12.

161 Newman, I. M., Anderson, C. S., & Farrell, K. A. (1992). **Role rehearsal and efficacy: Two 15-month evaluations of a ninth-grade alcohol education program.** *Journal of Drug Education, 22*(1), 55-67.

A 9th-grade alcohol education program aimed at reducing drinking, drinking and driving, and riding with a drinking driver was developed on the basis of problem behavior theory, social cognitive theory and role theory. The program was evaluated in the junior high schools of an urban Nebraska school district. In Year 1 the program was taught by Social Studies teachers to all of the 51 9th-grade classes in half the junior high schools in a single school system; the other half served as controls. In Year 2 the program was taught to the 9th-grade students of the same school system by English teachers. Students' knowledge, skills and practices were measured before, four-six weeks after, and one year after the program. Results indicated significant increases in knowledge and perceived ability to resist pressures to drink among experimental students. No significant differences were noted for the drinking or the drinking and driving practices of either group. One year after the program, significantly fewer students in the experimental classes reported riding with a driver who had been drinking. Results suggested that English teachers were more effective than Social Studies teachers in teaching this program.

162 Novacek, J., Raskin, R., & Hogan, R. (1991). **Why do adolescents use drugs? Age, sex, and user differences.** *Journal of Youth and Adolescence, 20*(5), 475-492.

Substantial substance use was found in a rural Oklahoma population of 2,637 students in grades 6-12. These adolescents explained their drug use with five kinds of reasons: belonging, coping, pleasure, creativity, and aggression. Different reasons for using drugs were related to frequency of substance use. There were age, gender, and user differences in the reasons adolescents reported for their drug use. Results indicated that reasons for use are related to different patterns of use, and different expectations about effects. Using drugs for pleasure or coping was associated with more frequent use, and using for

belonging, creativity, or aggression was associated with less frequent use. Reasons given by non-drug-using students for which they might try using drugs were mostly related to disinhibition. High school students as a group reported themselves more likely to use drugs for pleasure and coping, while middle school students were more likely to say they would use drugs for belonging and creativity. This suggests that teaching peer refusal skills may be effective for nonusing elementary and middle school adolescents, but these techniques would be less effective with drug-using or older youth for whom learning life and coping skills would be more appropriate. Males, as a group, gave pleasure more often as a reason for use, compared to females who were more likely to list coping. It is proposed that students' reasons for use must be considered in developing interventions: students who use drugs to help them cope must be provided with alternative support. Programs must be shaped to meet both students' needs and their experiences.

163 Nucci, L., Guerra, N., & Lee, J. (1991). **Adolescent judgments of the personal, prudential, and normative aspects of drug usage.** *Developmental Psychology, 27*(5), 841-49.

Group-administered questionnaires were used to examine the social judgments of 9th- and 12th-grade students (N=139) regarding drug usage. Subjects were divided into groups on the basis of self-reported drug use. Low-drug-use and high-drug-use subjects of both grades tended to view drug use as a matter of personal discretion or prudence rather than an issue of morality or social convention. High-drug-use subjects were more likely than low-drug-use subjects to view drug use as a personal rather than prudential issue and to view the behavior as less harmful and less wrong. They were also more likely to view themselves as the only authority with regard to drug use and less likely to view parents or the law as authorities. There were no significant age effects.

164 O'Connell, D. F. (1991). **Treating the high risk adolescent: A survey of effective programs and interventions.** *Journal of Adolescent Chemical Dependency, 1*(3), 55-75.

Various types of risks for serious alcohol and other drug use problems are reviewed, along with effective intervention and treatment programs for schools and communities, including peer programs. It is proposed that strong efforts must be made at the early identification of adolescents who are vulnerable, and the design of appropriate interventions. Further research should evaluate the effectiveness of existing programs and move toward developing more comprehensive programs for high-risk youth.

165 O'Connor, J., & Saunders, B. (1992). **Drug education: An appraisal of a popular preventive.** *International Journal of the Addictions, 27*(2), 165-185.

School-based drug education programs as currently conceived and implemented are critically appraised. The evidence indicates that while such education influences knowledge and attitudes, it has little impact on behavior. In most drug education programs the value and meaning of being a drug user is misunderstood and the benefits of drug use underestimated. It is argued that existing health promotion models have in the main failed to adopt a systemic approach to drug use and have focused too much attention on individual change at the expense of a broader social understanding of behavior. It is proposed that with regard to illicit drugs, future educational endeavors should take the form of training in

"low(er) risk" drug use within a harm-reduction paradigm, and that with regard to alcohol, such strategies need to be augmented by social and legislative changes. It is concluded that if a harm-reduction and systemic approach is adopted, then education will lose some of its popularity, since such an endeavor will be a more challenging, politically difficult, and socially complex enterprise.

166 Oetting, E. R., & Beauvais, F. (1991). **Critical incidents: Failure in prevention.** *International Journal of the Addictions, 26*(7), 797-820.

Programs which fail are rarely reported in the literature; accordingly, the reasons for failure are seldom explored. Three reasons are given for the failure of these prevention programs: (1) failure to initiate; (2) failure to be effective; and (3) failure to thrive. Failures of all three types are described briefly, with some discussion of the three reasons.

167 Oetting, E. R., & Beauvais, F. (1991). **Orthogonal cultural identification theory: The cultural identification of minority adolescents.** *International Journal of the Addictions, 25*(5a-6a), 655-685.

An orthogonal theory of cultural identification is presented as a multi-dimensional model which places no limits on patterns of cultural identification and adaptation: a model which allows for unicultural, bicultural, and multicultural identification; strong identification with one culture and weak identification with one or more others; or even no strong identification with any culture. This model, instead of placing cultures at opposite ends of a continuum, poses identification with different cultures as dimensions independent of each other, so that increasing identification with one culture does not necessarily entail decreasing identification with another. The authors' studies of Native American and Mexican American youth have found that: (1) identification with Anglo culture was related to having Anglo friends and to family acceptance of an Anglo marriage; and (2) identification with either the minority or the majority culture was a source of personal and social strength; but that (3) this greater strength did not translate automatically into less drug use, because drug use was related to culture-specific drug attitudes and practices. Items are reviewed for assessing cultural identification orthogonally, the implication being drawn from the research that it is essential to assess identification with particular cultures independently.

168 Oetting, E. R., Spooner, S., Beauvais, F., & Banning, J. (1991). **Prevention, peer clusters, and the paths to drug abuse.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 239-261). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

A complex four-dimensional model for organizing, categorizing, and planning prevention programs is presented, which uses path models based on peer-cluster theory to identify specific prevention goals. The goals are examined in relation to the three dimensions of the cube: the target of the intervention, the purpose of the intervention, and the method of intervention.

169 Office for Substance Abuse Prevention. (1991). ***The future by design: A community framework for preventing alcohol and other drug problems through a systems approach.*** (DHHS Publication No. ADM 91-1760). Washington, DC: U.S. Government Printing Office.

Prevention research and demonstration studies are finding that coordinated prevention efforts that offer multiple strategies, provide several points of access, and coordinate and expand community opportunities are a most promising approach to preventing alcohol and other drug problems. To provide direction for these programs, OSAP initiated a project for developing a Community Prevention System Framework. During the summer of 1989, OSAP surveyed 26 communities throughout the United States that were identified as having a prevention system in place. OSAP's framework is based on results of the survey plus recommendations from a broad cross-section of community members. It also encompasses learning from prevention theory, research, and program development related to at-risk populations. The framework offers direction for communities beginning to develop a prevention system as well as affirmation, encouragement, and new ideas for those communities already engaged in the process of system development.

170 Office for Substance Abuse Prevention. (1991). ***Preventing HIV infection among youth.*** (OSAP Technical report 5). (DHHS Publication No. ADM 91-1774). Rockville, MD: U.S. Department of Health and Human Services.

There is clearly a potential for spread of HIV infection among adolescents—particularly those at risk for alcohol and other drug problems. Alcohol and other drug use prevention programs are in an excellent position to take an important role in preventing the spread of HIV among youth. HIV prevention can be effectively integrated with alcohol and other drug use prevention efforts using many already available resources.

171 Office for Substance Abuse Prevention: High Risk Youth Branch: Division of Demonstrations and Evaluation. (1991, October). ***Signs of effectiveness: The high risk youth demonstration grants.*** Rockville, MD: Office for Substance Abuse Prevention.

The demonstration findings produced by grantees funded by the Office for Substance Abuse Prevention (OSAP) in 1987 under the High Risk Youth Demonstration Grant Program are presented. The strategies demonstrated by these projects addressed one or more risk factors found within 5 major risk factor groupings: (1) individual-based risk factors; (2) family-based risk factors; (3) school-based risk factors; (5) peer-based risk factors; and (6) community-based risk factors.

172 O'Malley, P. M., & Wagenaar, A. C. (1991). **Effects of minimum drinking age laws on alcohol use, related behaviors, and traffic crash involvement among American youth: 1976-1987.** *Journal of Studies on Alcohol, 52*(5), 478-491.

Existing data, collected by the Monitoring The Future Project (the National High School Seniors Survey), an ongoing study involving annual nationally representative surveys of high school seniors and annual follow-up surveys by mail of recent graduates, was used in

order: (1) to delineate cross sectional differences among U.S. high school seniors and young adults that may be due to variations in recent years in state level minimum drinking age laws; and (2) to examine the effects of recent changes in minimum drinking age laws on alcohol consumption and other relevant attitudes and behaviors. A separate, coordinated study used time-series analyses of official reports to examine effects of increases in the minimum drinking age in several states on rates of fatal crashes. Time-series results were compared with findings from self-report data. The major findings were: (1) higher minimum drinking ages were associated with lower levels of alcohol use among high school seniors and recent high school graduates, even after multivariate controls; (2) lower levels of alcohol use were observed across a number of demographic variables; (3) the lower levels of use persisted into the early twenties, even after all respondents were of legal age; and (4) lower involvement in alcohol-related fatal crashes among drivers under 21 appeared to be due to lower alcohol consumption rates, particularly less drinking in bars or taverns.

173 Orr, D. P., Beiter, M., & Ingersoll, G. (1991). **Premature sexual activity as an indicator of psychosocial risk.** *Pediatrics, 87*(2), 141-147.

The association between premature sexual activity and other health risk activities, including alcohol and drug use, and behavioral and emotional problems was studied among 721 male and 672 female Indiana junior high school students (aged 12 to 16 years). Information on sexual activity, demographic factors, socioeconomic status, use of alcohol and marijuana, school behavior problems, emotional problems (difficulty making friends, nervousness, loneliness, trouble sleeping), attempted suicide, arrests, etc., was obtained by questionnaire. About 63% of the boys and 36% of the girls were nonvirginal (reported sexual intercourse at least once), and the proportion of sexual activity increased with age. Sexually active subjects were more likely to engage in other risky activities, including alcohol and marijuana use, use of other drugs, engagement in minor delinquent acts, and engagement in activities resulting in school suspension. Sexually active girls were 6.3 times more likely to report having attempted suicide. Emotional problems were weakly linked with engagement in sexual activity, but alcohol and marijuana use were closely linked. By age 15, 63% of the boys and 50% of the girls reported both sexual experience and use of alcohol or marijuana. The association of early sexual behavior with other health-endangering behaviors among adolescents is discussed.

174 Pellow, R. A., & Jengeleski, J. L. (1991). **A survey of current research studies on drug education programs in America.** *Journal of Drug Education, 21*(3), 203-210.

This article surveys recent research findings on drug education programs in America. Findings have been somewhat contradictory, but a pattern of encouraging results seem to favor prevention programs that focus on resistance training. Research results were complimentary of DARE (Drug Abuse Resistance Education) and SAP (Student Assistance Program) which emphasizes intervention strategies. Experts noted that drug education programs require interagency collaboration among schools, communities, and families. Authorities appealed for a higher funding priority toward evaluating the effectiveness of drug education programs. Information is also provided about what parents, schools, students, and communities can do concerning drug prevention efforts.

175 Pendorf, J. E. (1992). **Leisure time use and academic correlates of alcohol abuse among high school students.** *Journal of Alcohol and Drug Education, 37*(2), 103-110.

High school students' use of alcohol is examined in relation to their use of leisure time and their attitudes toward school climate. Male and female students in grade 10 (n=115) and grade 12 (n=107) in a rural Pennsylvania high school were surveyed. Heavy use of alcohol correlated with participation in social and vocational activities. Heavy users enjoyed school and school subjects less, had greater potential for conflicts with teachers, and received lower grades. These results demonstrated that heavy alcohol use bore a relationship to aspects of social and vocational behaviors and attitudes required for healthy and positive adolescent development. These findings clouded the generalized detrimental effects from high school students' heavy use of alcohol.

176 Pentz, M. A., & Trebow, E. (1991). **Implementation issues in drug abuse prevention research.** In C. G. Leukefeld, & W. J. Bukoski (Eds.), *Drug abuse prevention intervention research: Methodological issues* (pp. 123-139). (NIDA Research monograph 107). (DHHS Publication No. ADM 91-1767). Washington, DC: U.S. Government Printing Office.

Issues of definition (adherence, exposure, reinvention), measurement (self-report, other's report, behavioral observation), and parameters of influence (person, situation, environment) are addressed. Implementation results of recent drug prevention and health promotion studies are reviewed as they related to these issues. A general model is then proposed that represents implementation as a multiply determined process involving the interaction of person, situation, and environmental influences. Using this model, several recommendations are offered for estimating the "true" drug abuse prevention program effect as the average of effect estimates generated from experimental program assignment and level of program implementation. Potential differences between researcher and programmer standards of quality or level of implementation are noted, using the common interpretation of the efficacy/effectiveness research trial continuum as an example.

177 Petty, R. E., Baker, S. M., & Gleicher, F. (1991). **Attitudes and drug abuse prevention: Implications of the elaboration likelihood model of persuasion.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 71-90). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Although some attitudes are based on a careful reasoning process in which externally provided information is related to oneself and integrated into a coherent knowledge structure, other attitudes are formed as a result of relatively simple cues in the persuasion environment. One of the most important determinants of motivation to think about a message is the perceived personal relevance of that message. When personal relevance is high, people are motivated to scrutinize the information presented and integrate it with their existing beliefs, but when perceived relevance is low, messages may be ignored or processed for peripheral cues. Many people may feel that anti-drug messages are not relevant to them or have few consequences for them. An important goal of any drug education strategy will be to increase people's motivation to think about anti-drug messages by increasing the perceived personal relevance of these messages. The extent and nature of

a person's cognitive responses to external information may be more important than the information itself. Attitudes can be changed in different ways (central vs. peripheral routes), and some attitude changes are more stable, resistant, and predictive of behavior than others.

178 Pickens, R. W., & Svikis, D. S. (1991). **Prevention of drug abuse: Targeting risk factors.** In L. Donohew, H. E. Sypher, & W. J. Bukoski (Eds.), *Persuasive communication and drug abuse prevention* (pp. 35-49). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Because multiple risk factors appear to be involved in drug use, interventions must be developed to confront each of these risk factors if we are to be effective in our overall goal of preventing drug use. However, it is recognized that knowledge about etiology alone will not be sufficient. Other knowledge is also needed, including knowledge about the nature and characteristics of drug use, the adverse consequences of drug use, and methods for effective delivery of prevention materials. Taken together, this research provides the foundation on which new prevention interventions are developed. In future etiological research, increased attention should be paid to familial transmission of both drug use and dependence, and to possible mechanisms (both genetic and environmental) that may underlie familial influences. Because most children of alcoholics and drug abusers do not become alcoholics or drug abusers themselves, identification of mechanisms that underlie drug use may allow individuals in this group to be identified on the basis of some characteristics other than group membership, thus avoiding the negative effects of labeling. In future studies of familial transmission, particular attention should be paid to members of high-density alcoholic families who do not develop alcoholism, as such studies may identify protective influences.

179 Polcin, D. L. (1992). **A comprehensive model for adolescent chemical dependency treatment.** *Journal of Counseling & Development, 70,* 376-382.

An overview is provided of different treatment perspectives in the addictions field. It is then argued that combining various approaches in treatment is the most effective way of addressing the array of needs that chemically dependent clients present. Particular emphasis is put on the treatment needs of adolescent clients with addictions, and a comprehensive inpatient program for chemically dependent adolescents is described that incorporates the strengths of various models.

180 Powers-Lagac, V. (1991). **Values-clarification approaches to pre-teen substance-use prevention.** In B. Forster, & J. C. Salloway (Eds.), *Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook* (pp. 23-41). (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen.

An overview is provided of four school-based drug education programs which use a cognitive-affective (values-clarification) approach to prevention. Programs have been developed for grades 1-8 (6- to 13-year-olds), though most were implemented at the 6th-grade level (11-year-olds). The research demonstrated that when children were given facts about drugs and the effects of drugs coupled with concrete skills to assist them to resist

peer pressure, they were better equipped to make healthy, responsible choices for their lives.

181 Pryor, C. B. (1992). **International exchange on preventing alcohol misuse.** *Journal of Alcohol and Drug Education, 37*(3), 114-125.

An initiative to establish an international exchange between persons interested in preventing alcohol misuse, beginning with a trip by Americans to the Soviet Union, revealed promising and disappointing prospects for ongoing exchange. In the summer of 1990, American youth and adult leaders in school- based prevention programs traveled to the Soviet Union to share information on prevention programs and stimulate continued international exchange to prevent alcohol misuse. Program components included pre-travel study of alcohol problems in the Soviet Union, program visits, youth group discussions, a pilot survey, dialogue with Soviet health specialists and educators, a televised talk show, and homestays. Explaining American prevention programs to people in another culture sharpened participants' awareness of cultural and economic factors linked to alcohol use and motivated them to continue international cooperative activities. Continued development of international study trips and exchanges on healthy lifestyles is recommended as a means to enhance alcohol education programs.

182 Pursley, W. L. (1991). **Adolescence, chemical dependency, and pathological gambling.** *Journal of Adolescent Chemical Dependency, 1*(4), 25-47.

From a review of the problem of adolescence, adolescents from dysfunctional families, the nature and extent of chemical dependency and pathological gambling among adolescents, and the definition of that experience as addiction, it is concluded that there is a growing need for concern. Treatment using a cognitive-behavioral, relapse-prevention model seems best suited to the adolescent addictive experience because it focuses attention on the primary aspects of the disorder while helping to address the adolescent's developmental needs. The key to successful treatment is contingent upon two interrelated goals: an accurate and comprehensive family assessment must occur; and in-depth cognitive/behavioral assessment must be undertaken with the addicted adolescent.

183 Ralph, N., & Morgan, K. A. (1991). **Assessing differences in chemically dependent adolescent males using the Child Behavior Checklist.** *Adolescence, 26*(101), 183-94.

Child Behavior Checklist scores of 59 chemically dependent male adolescents were compared with scores of a normative group on 4 adaptive behavior scales and 12 behavior problem scales. Groups differed significantly on all measures. Compared to the general clinical group, the chemically dependent group scored significantly higher on delinquent and uncommunicative behaviors scales, and significantly lower on immature and hostile-withdrawn behaviors scales.

184 Resnik, H., & Wojcicki, M. (1991). **Reaching and retaining high risk youth and their parents in prevention programs.** In E. N. Goplerud (Ed.), *Preventing adolescent drug use: From theory to practice* (pp. 91-126). (OSAP Prevention monograph 8). (DHHS Publication No. ADM 91-1725). Rockville, MD: U.S. Department of Health and Human Services.

Promising approaches to aggressive outreach, involvement, and retention methods appropriate for high-risk youth and their families, are described based on the scant literature and on information gathered directly from prevention programs. It is clear from these sources that no single approach is appropriate for every community. Special consideration of the culture, values, social structure, and institutional systems of each target community or group is essential. Also critical is involvement of the target population in the planning, development, and implementation of prevention programs and the involvement of formal and informal groups and institutions in outreach efforts. Often, outreach is most effective when prevention programs train community workers to work directly in natural settings that youth and their families reside in or frequent. Using positive role models, involving parents, providing incentives for participation, offering needed services or referral for services, and training youth to be peer leaders are among a few of the useful strategies described for enhancing involvement and retention in alcohol and other drug prevention programs.

185 Richter, S. S., Brown, S. A., & Mott, M. A. (1991). **The impact of social support and self-esteem an adolescent substance abuse treatment outcome.** *Journal of Substance Abuse, 3*, 371-385.

Although poor social resources and low self-esteem have been implicated in the development of teenage drug abuse, the role of these factors in the remission of adolescent addiction remains unclear. Social support characteristics and self-esteem are examined in relation to outcome following adolescent chemical dependency treatment. Adolescents and their parents completed self-reported questionnaires and a research interview during treatment and at 6 and 12 months post-treatment. Two types of outcome were assessed at follow-up: (1) alcohol and drug use, and (2) functioning in major life domains (e.g., family, school/work, peers). Results indicated that the quality of social resources (i.e., drug-use patterns of supports) reported during treatment was related to alcohol- and drug-use status post-treatment, with abstainers reporting more nonusing supports than teens who returned to heavy drug use. Self-esteem and the degree of satisfaction with social support during treatment were negatively correlated with the number of major life problems during the 6 months following discharge. Altogether, inpatient measures of self-esteem, number of high-quality supports, and social support satisfaction accounted for 16% of the variance in 6-month substance use outcome and 25% of the variance in psychosocial functioning 6 months post-treatment. Six-month social support and self-esteem measures were similarly related to 1-year outcome.

186 Roberts, T. B. (1991). **When the drug war hits the fan.** *Phi Delta Kappan, 73*(1), 58-61.

A growing number of experts and ordinary citizens are concluding that our nation's current drug policies are immoral, wasteful, inefficient, un-American, and more harmful than beneficial. The Drug War is becoming a politically, racially, and religiously charged issue. American schools are not being the exemplary models of personal liberty that they should

be in a democracy, and administrators are asked to curtail the constitutional freedoms of their students for an alleged "compelling state interest"—titled the "War on Drugs." In fact, the Drug War is the embodiment of a political and religious ideology, and the schools have become partisans in this non-debate. Drug War and Drug Peace should be discussed openly, in a democratic manner, and conclusions should be based on evidence, not on wild stories and fear-mongering. Schools can be of great service to their communities by obtaining materials and preparing citizens to consider all available evidence on this issue. The Drug War places U.S. liberties, communities, and children at risk. Children are taught that all drugs cause nothing but addiction and suffering, and then find out that some drugs can be enjoyable and relatively harmless. Thus, they learn to distrust all warnings and cautions, and the parents, schools, government and law enforcement agencies that promulgate lies lose all credibility and respect. A sidebar outlines drug abuse lies promulgated by the media, and a brief bibliography is provided of alternative thinking on drug issues, challenging prevailing assumptions.

187 Rogers, P., Silling, M., & Adams, L. R. (1991). **Adolescent chemical dependence: A diagnosable disease.** *Psychiatric Annals, 21*(2), 91-97.

Adolescent drug use, abuse, and dependence are part of a continuum that can be interrupted with recognition and treatment. Progression of the disease of chemical dependence occurs at a more accelerated rate in adolescents than in adults, which makes early diagnosis and intervention essential. It is crucial that physicians who work with adolescents maintain a high index of suspicion for substance abuse. It is equally important that they understand that chemical dependence is not only a chronic and progressive disease, but more importantly, that it is a diagnosable and treatable disease.

188 Sandberg, K. A. (1991). **Chemical use among hearing impaired adolescents.** *Student Assistance Journal, 4*(2), 34-35,52.

Many prevention programs, comprehensive substance abuse education programs, and student assistance programs overlook the needs of hearing impaired students. Barriers to communication and assistance are discussed, as well as some contexts of substance use in communities of hearing impaired people, are discussed. Means are suggested for better serving hearing impaired students and some resources are listed for more information.

189 Schaps, E., & Battistich, V. (1991). **Promoting health development through school-based prevention: New approaches.** In E. N. Goplerud (Ed.), *Preventing adolescent drug use: From theory to practice* (pp. 127-180). (OSAP Prevention monograph 8). (DHHS Publication No. ADM 91-1725). Rockville, MD: U.S. Department in Health and Human Services.

Relevant literature is reviewed to identify innovative educational practices that may have widespread and enduring effects on children's psychological and social health—including preventive benefits for children likely to be at risk for mental, emotional, or social problems such as alcohol or other drug use. A major part of the review focuses on four program innovations in primary prevention and in promotion of basic psychological or social health among preschool through elementary school-aged children. Two programs were explicitly

designed as prevention programs, one to enhance the development of particular life skills, and one to promote the development of more general positive social attitudes, values, and behaviors. Consequently, the programs also differ in their theoretical derivations, ranging from theories of child development to delinquency theory to the more limited body of literature on social competence. All four programs were designed to become integral aspects of the school, and are explicitly developmental. All emphasize tailoring program practices to students' current level of maturity/stage of development, and most explicitly involve a graduated sequence of activities aimed at acquisition and refinement of successively more complex skills. They all stress the importance of active involvement of students in their own development and incorporate procedures to provide students with opportunities to exercise autonomy, make their own decisions, and apply the knowledge and skills they have learned to their social interactions. Consistent with this emphasis, the programs view the role of the teacher largely as facilitating students' development through the provision of structure, guidance, and support. All consider the acquisition and refinement of academic and social skills and competencies to be important elements of the intervention, and recognize the importance of positive interpersonal relationships for health development. Furthermore, all explicitly incorporate procedures designed to promote positive peer and adult-child (teacher-student, parent-child) relationships. Social problems are, by definition, behaviors that violate social norms and values; they indicate that the socialization process has not been effective. Developmentally, the socialization process may be conceived of as a series of adaptations by individuals to the demands and expectations of the society in which they exist. Generally, a pattern of increasing alienation from society, beginning in early childhood in the family and continuing into adolescence, is associated with later social problem behaviors, including involvement in delinquency and alcohol and other drug use. Schooling should be concerned with the development of the whole child, not merely basic academic competencies, and that cognitive, affective, and social development are all integral aspects of sound educational practice. Schools need to effectively address children's needs for competence, autonomy, and belongingness, so that schooling becomes a positive experience for all students. It is recommended that alcohol and other drug prevention research and demonstration programs be incorporated within the broader framework of promoting health development in children. Efforts need to begin early, during preschool and elementary school. It is concluded that comprehensive school-based approaches to promoting healthy development, when thoughtfully designed and carefully implemented, can have significant benefits when targeted to a wide variety of problem behaviors.

190 Scheier, L. M., & Newcomb, M. D. (1991). **Differentiation of early adolescent predictors of drug use versus abuse: A developmental risk-factor model.** *Journal of Substance Abuse, 3*(3), 277-299.

Many psychological factors are associated with adolescent drug use, though most have not been tested as true predictors of drug use in prospective studies. Studies to date have also not differentiated predictors of drug use from abuse and have not addressed differential effects for specific substances. To address these concerns, the multiple risk-factor approach was expanded using 2-year longitudinal data from a sample of 7th-graders. Frequencies of use for alcohol, cigarettes, marijuana, cocaine, and hard drugs were assessed at Time 1 and Time 2 and used to reflect latent constructs of poly-drug use. From a set of 29 risk factors, unique predictors of any substance were separated conceptually according to whether they most related to initiation/experimental or problem/heavy drug use and were then summed into two-unit weighted indexes at each time. Distribution-free structural equation models were used to accommodate the non-normal distributions of the

illicit drug use measures. The problem risk index was strongly correlated with poly-drug use at Time 1 and increased poly-drug use at Time 2. Several specific relationships between risk and drug use across time also were noted.

191 Scheier, L. M., & Newcomb, M. D. (1991). **Psychosocial predictors of drug use initiation and escalation: An expansion of the multiple risk factors hypothesis using longitudinal data.** *Contemporary Drug Problems, 18*(1), 31-73.

A study of the psychosocial predictors of drug use initiation and escalation is described, with a focus on the multiple risk factors hypothesis, in effort to explore the relationship between risk and drug use over time. The data for this study were obtained as part of a drug education program conducted in California between 1979 and 1984. As expected, the problem/heavy risk index was strongly related to drug use increases in subjects between grades 7 and 9. Contrary to expectations, it was also more strongly related to initiation between grades 7 and 9 than was the initiation/experimentation risk index. Results thus indicate that either the indices were conceptualized inappropriately, or that the factors comprising the initiation/experimentation index are not significant. There was some correlation between risk for initiation and initiation of hard drug use, but this correlation was much stronger for female users than for the entire sample.

192 Schinke, S. P., Botvin, G. J., & Orlandi, M. A. (1991). ***Substance abuse in children and adolescents: Evaluation and intervention.*** (Developmental clinical psychology and psychiatry 22). Newbury Park, CA: Sage Publications, Inc.

Information and studies are reviewed about the causes of alcohol and other drug abuse among youth, its prevention, and its treatment, in a format useful for program design, implementation, evaluation, and dissemination. Separate sections are devoted to epidemiological data on use prevalence, risk factors, etiological theories, prevention approaches and research studies of them, treatment, program evaluation, and issues regarding program dissemination. Alternative types of interventions and approaches are described from community, school, and media-based programs to more traditional forms of inpatient and outpatient treatments. Evaluation and prevention approaches are discussed, as well as the paucity of demonstrated success in prevention. A major theme is the inadequacy of "traditional" approaches limited only to information, affective education, or alternatives programs. Most programs relying on traditional approaches have not been shown to affect drug behavior. While some of these failings may be related to inadequate execution or implementation, the primary cause identified is "incomplete conceptual models that fail to target the most important causal factors." Yet it is concluded that authoritative studies offer strong grounds for the argument that prevention works when addressing the psychosocial factors which play the most important roles in promoting substance use. Programs considered the most promising were those focusing on social influence resistance skills and social or life skills training and extending the scope of efforts beyond the schools into a comprehensive community-based aproach.

193 Schinke, S. P., Cole, K. C., & Orlandi, M. A. (1991, March). ***The effects of boys & girls clubs on alcohol and other drug use and related problems in public housing. Final research report.*** New York, NY : Boys and Girls Clubs of America.

The effects were evaluated of Boys and Girls Clubs and related SMART Moves drug prevention programs on children and adolescents living in public housing and on the quality of life in public housing. Fifteen public housing developments were studied in a representative sample of American cities focusing on alcohol and other drug use, delinquency, and Boys Clubs and Girls Clubs, which included the SMART Moves drug abuse prevention program; another five were served by traditional Boys and Girls Clubs; and the remaining five sites had no Boys and Girls Clubs. Analysis of the data indicated that the clubs exerted a positive and palpable influence on the human and physical environment. Youth with access to the clubs were more involved in health and constructive activity. Adult residents also were positively affected by the clubs. For youth and adults alike, the presence of Boys Clubs and Girls Clubs was associated with an overall reduction in drug and alcohol use, drug trafficking, and other related criminal activities. The presence of crack cocaine was lowest at sites that include the SMART Moves program. Finally, the presence of the clubs appeared to boost morale generally and to encourage residents to organize and improve their communities. Free from Boys and Girls Clubs of America, 771 First Avenue, New York, NY 10017.

194 Schinke, S. P., Orlandi, M. A., Vaccaro, D., Espinoza, R., & McAlister, A. (1992). **Substance use among Hispanic and non-Hispanic adolescents**. *Addictive Behaviors, 17*, 117-124.

Lifetime prevalence data on substance use with demographic and psychosocial variables among 2,821 Hispanic students were compared with data on non-Hispanic White students at public high schools and middle schools in two Southwestern cities. Study findings revealed that ethnic-racial background factors were not the strongest predictors of substance use. Rather, when the analyses accounted for school grades and for maternal education, non-Hispanic youth had higher lifetime substance use rates than Hispanic youth. Study findings suggested that preventive intervention and treatment efforts for substance abuse problems among adolescents should consider sociodemographic risk factors as well as ethnic-racial factors.

195 Schwartz, R. H. (1991). **Heavy marijuana use and recent memory impairment**. *Psychiatric Annals, 21*(2), 81-82.

Interviews of hundreds of adolescents who were admitted to a drug abuse treatment facility modeled on the philosophy of a therapeutic community, showed an impressive number of former daily marijuana smokers who expressed serious concern about lingering memory deficits. At a re-interview of 20 such patients approximately 1 month after the initial intake interview, almost all of them stated that their heads had "cleared" and that their memory was not as hazy as it had been in the 30-day withdrawal period from marijuana. The test battery, consisting of a complete IQ test and six specific tests for auditory, visual, and spatial short-term memory, was administered 48 hours after admission to treatment; retest was administered 6 weeks later. During the interval between the initial test and the retest, the marijuana smokers, as is the rule in therapeutic communities, were under 24-hour surveillance. All submitted biweekly urine specimens for drugs of abuse. Results from this study showed a statistically significant impairment on some tests of visual and auditory

memory in the 10 daily marijuana smokers compared with the 17 control subjects. Persistent, heavy marijuana use induced significant and surprisingly long-lasting deficits of short-term memory.

196 Schwartz, S. (1991). **Decision factors and program preferences of drug-using and non-using students.** *Journal of Drug Issues, 21*(3), 527-541.

Factors considered by high school youth when deciding whether to use alcohol and marijuana are examined along with student perceptions of various drug prevention initiatives. The sample included 1,177 students at Missouri high schools. Respondents who reported no drug use in the preceding year cited a greater number of decision-making factors and endorsed more interventive strategies as effective in deterring personal drug use than students with some level of prior drug involvement. Concern about injuring another person was the most commonly cited decision factor, irrespective of previous alcohol or marijuana use. For all levels of student drug involvement, the program initiatives most frequently endorsed included providing information about the negative consequences of substance abuse. The importance of sub-group analyses is addressed with reference to drug program design and evaluation.

197 Segal, B. (1991). **Adolescent initiation into drug taking behavior: Comparisons over a 5-year interval.** *International Journal of the Addictions, 26*(3), 267-279.

Acquisition curves for six substances were compared for adolescents in two samples taken in 1981-1982 and 1987-1988. Individual variations in initiation ages were found for different substances, but the general pattern of exposure to drugs was essentially stable over the time interval. The findings suggested that first experience with all drugs measured for most adolescents occurred between ages 13 and 16. The specific acquisition curves for each drug can be used to target prevention programs at specific needs.

198 Shilts, L. (1991). **The relationship of early adolescent substance use to extracurricular activities, peer influence, and personal attitudes.** *Adolescence, 26*(103), 613-617.

A sample of 237 Virginia students in grades 7 and 8 was assessed for levels of drug/alcohol use, involvement in extracurricular activities, peer influence, and personal attitudes. Students were administered the Alcohol and Drug Use Index and the Student Attitude and Behavior Questionnaire. Cross tabulations and the chi-square test of independence were used to statistically compare three groups (107 nonusers, 80 users, and 50 abusers).The following results were seen: (1) 91% of users and 94% of abusers used alcohol and/or drugs during weekends; (2) 28% of users and 54% of abusers used drugs to relieve pressure and stress at home; (3) 56% of users and 88% of abusers reported that their friends used alcohol and/or drugs; (4) users obtained fewer types of substances, spend less money, and bought substances less often than abusers; (5) nonusers reported more family involvement than users and abusers; (6) nonusers reported less involvement with friends; and (7) nonusers reported higher involvement in extracurricular activities. It is concluded that nonusers present a significantly different profile than users and abusers of alcohol and/or drugs. Several trends emerged from the data: abusers tended to report little involvement in extracurricular activities, and reported spending more time with friends than

with family, identifying their friends as people who use or abuse drugs and alcohol; non-users tended to report high involvement in extracurricular activities and spending more time with family and less with friends.

199 Shope, J. T., Dielman, T. E., Butchart, A. T., Campanelli, P. C., & Kloska, D. D. (1992). **Elementary school-based alcohol misuse prevention program: A follow-up evaluation.** *Journal of Studies on Alcohol, 53*(2), 106-121.

An Alcohol Misuse Prevention Study (AMPS) curriculum for 5th- and 6th-grade students was developed, implemented and evaluated with over 5,000 students. The AMPS program emphasized social pressures resistance training, focusing on the immediate effects of alcohol, risks of alcohol misuse and social pressures to misuse of alcohol. Schools were randomly assigned to curriculum, curriculum plus booster, or control groups with half of each group pretested and all posttested. Measures focused on susceptibility to peer pressure, internal health locus of control, understanding of the curriculum material, alcohol use and alcohol misuse. After 26 months, there was a significant treatment by occasion interaction on internal health locus of control (6th grade). A significant treatment by occasion interaction effect was also found with respect to curriculum measures in both grades. There were no significant treatment by occasion interactions with respect to alcohol use or misuse when the groups as a whole were considered. When subgroup analyses based on type of prior drinking experience were conducted, however, significant program effects on alcohol misuse were found among 6th-grade students who had experienced unsupervised as well as supervised drinking prior to the prevention program.

200 Shulman, G. D. (1991). **A typology of chemically dependent adolescents.** *Journal of Adolescent Chemical Dependency, 1*(3), 29-41.

A set of four types of chemically dependent adolescents is described, differentiated in terms of drinking or drug use pattern and the desired goal; behavior when drug-affected; psychological features; characteristic pattern of social interaction; school performance; family dynamics, survivor role if a child of an alcoholic; and previous psychiatric diagnoses if applicable. Appropriate treatment strategies are described for each type of adolescent. The types are: (1) rebellious/aggressive; (2) low self-esteem/often depressed; (3) shy/anxious; (4) all-American/bright.

201 Sigmon, J. W. (1991). **Alcohol and other drug programs: a new model.** *Student Assistance Journal, 4*(3), 30-32, 52.

The faults of many alcohol and other drug programs in secondary schools lie in the inappropriate allocation of prevention strategies. Some schools, for instance, send students apprehended for violating the school's drug policy to a primary prevention program which is affective and interpersonal in nature, when what is needed is a secondary prevention program, beginning with a comprehensive needs assessment, involving the parents, stressing the immediate concrete effects of drug use, and examining familial, societal, and community factors.

202 Silverman, W. H. (1991). **Prevalence of substance use in a rural teenage population.** *Journal of Adolescent Chemical Dependency, 2*(1), 107-117.

A survey was administered to all students (N=1,175) enrolled in grades 7-12 in a rural Florida school system to assess prevalence rates of substance use for teens and their parents and lifestyle variables that relate to substance use. The variables of age, sex, and race were all related to both frequency and type of substance abuse. Lifestyle variables such as music preference, sexual activity, and choice of friends also related to substance use. Two distinct populations of students were identified. The vast majority (83%) were either abstainers or experimental users—the population to which primary prevention strategies are addressed. The second population, multi-problem teens (17%), had a clearly identified nonconformist lifestyle: this population, it is contended, requires traditional forms of therapeutic intervention and treatment. It is concluded that any well-designed needs assessment will identify adolescents with emotional difficulties, and so access to both psychotherapeutic and drug treatment interventions must accompany prevention programs. Further, prevention programs must target both specific drugs and specific populations.

203 Skinner, W. F. (1992). **Age and gender differences in a social process model of adolescent cigarette use.** *Sociological Inquiry, 62*(1), 57-82.

The influence of age and gender were studied on the ability of social process theory to explain adolescent cigarette use. Differences in the causal effects of social process variables for three age periods for male and female adolescents were examined. Longitudinal data from a sample of midwestern adolescents were analyzed using path analyses procedures. Findings from these analyses indicated that social process theory was better able to account for cigarette use among older females than any other age and gender group. For females, commitment to education and school activities were better predictors of cigarette smoking at a later age than an earlier age, whereas the opposite was found for belief in conventional societal rules. For males, previous smoking was the major variable in all three age groups to directly affect subsequent smoking.

204 Smart, R. G., & Adlaf, E. M. (1991). **Substance use and problems among Toronto street youth.** *British Journal of Addiction, 86*(8), 999-1010.

The extent of substance use and problems among adolescent "street" and homeless populations is largely undocumented. The prevalence of drug use was studied among a sample of 145 street youth aged 24 and younger, who were interviewed during February and March 1990 in Toronto, Canada, and compares these data to those derived from other adolescent street and mainstream populations, including a 1987 study of street youth in the Hollywood section of Los Angeles, California. Street and homeless youth are clearly a group at high-risk for developing significant alcohol and drug problems. Questionnaires covered service utilization, life history, well-being, alcohol use and problems, other drug use and problems, and demographic information. Average alcohol consumption was at least three times greater than the average for comparable-aged youth: almost half (47%) drank weekly, with consumption in the last 7 days averaging 15 standard drinks. These consumption levels were very similar to those reported for the Hollywood study. For some drugs, such as cocaine, LSD, and heroin, rates of use for the sample in the present study

were at least 10 times higher. Multiple drug use was clearly the norm. For both Toronto and Hollywood samples, almost half of the youths reported a serious level of alcohol problems. Drug problems were also prevalent, with about half reporting one to three drug problems and another 26% reporting four or more. Almost 90% reported either an alcohol or a drug problem. While drug problems among street youth are prevalent and serious, it must be recognized that they are not the only kind of problem which they face—in fact, the street youth themselves did not place their substance problems among their most pressing problems: their substance use was, in part, a response to life on the street. This was one of the sharpest contrasts with mainstream youth.

205 Smith, D. E., Ehrlich, P., & Seymour, R. B. (1991). **Current trends in adolescent drug use.** *Psychiatric Annals, 21*(2), 74-79.

It is asserted that today's adolescents have an expanded pharmacoepia available to them, with little to keep them from abuse. It is contended that the developmental models have been found to be the most useful recovery models. These models combine the 12-step concepts of Alcoholics Anonymous (AA) with psychotherapeutic techniques and provide a basis for understanding recovery as a process of new knowledge construction including the progressive development and integration of behavior, cognition and affect. Although new drug forms such as crack, and new destructive drug combinations appear to increase the danger drugs present to youth, the use of drugs is becoming unpopular, at least among middle-class adolescents, and alternatives to that use are presenting themselves.

206 Stein, M. (1991). **The place of sociology in a drug education curriculum.** *Journal of Drug Education, 21*(3), 269-282.

Consideration is given to the part a sociological perspective can play in a drug education curriculum. Sociology's study of human behavior from the context of various social groupings is considered appropriate to any understanding of drugs and drug use as are a number of substantive areas common to the discipline. The sociological perspective is examined from the broad foci of structure and process, and with each focus examples of a sociological approach to drug use is offered. The common concerns of these approaches, as well as their points of divergence, are discussed. A sample outline of a course in "Drugs and Society" is presented, suggesting the ways in which the sociological issues discussed could provide an orientation to the study of drug use in a social context.

207 Steinberg, L. (1991). **Adolescent transitions and alcohol and other drug use prevention.** In E. N. Goplerud (Ed.), *Preventing adolescent drug use: From theory to practice* (pp. 13-51). (OSAP Prevention monograph 8). (DHHS Publication No. ADM 91-1725). Rockville, MD: U.S. Department in Health and Human Services.

The available evidence suggests that AOD use is best understood as being intricately linked to other types of problem behavior and as a product of specific factors that affect some young people more than others. In other words, some young people have difficulty in making the transition from childhood to adulthood, and these difficulties may be manifested in AOD use. The majority of young people, however, make this transition without experiencing serious problems. Understanding the difference between risk and protective factors is important in designing successful prevention programs, because the program elements intended to minimize risk factors are likely to be different from those that focus on

developing protective factors. To date, we do not know how to predict the effectiveness of pairing a specific protective factor (intervention) with a particular risk group. Certain pairings seem logical, such as increasing bonding to school among youth experiencing academic difficulties, or fostering a close mentoring relationship between nonfamilial adults and youth at risk because of family problems. This is an area ripe for research.

208 Stevens, M., Youelles, F., Whaley, R., & Linsey, S. (1991). **Prevalence and correlates of alcohol use in a survey of rural elementary school students: The New Hampshire study.** *Journal of Drug Education, 21*(4), 333-347.

Alcohol use by 4th-, 5th- and 6th-grade students (N=1,190) was assessed during the Spring of 1987, in a survey of four rural New Hampshire school districts. Half of the students surveyed (n=596) drank, but not regularly; 5% (n=59) were regular drinkers, and an additional 2% (n=19) were regular drinkers and had been drunk at least once. Reported alcohol use increased with both grade and age, and males drank more than females. The child's attitude toward drinking, perceived family attitudes towards drinking, the number of drinking friends, and self-perceived wrongdoing by the child were four factors strongly related to alcohol use. Increased alcohol use was also associated with experimental and current use of cigarettes, marijuana, and smokeless tobacco.

209 Stowell, R. J. A. (1991). **Dual diagnosis issues.** *Psychiatric Annals, 21*(2), 98-104.

Adolescent substance abuse issues are discussed, with a focus on dual diagnoses. In a pilot study of 226 adolescents admitted for inpatient treatment for substance abuse disorder, 82% met the Revised Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) criteria for an Axis I psychiatric disorder. Of this group, 74% had two or more disorders, 61% had mood disorders, 54% conduct disorders, 43% anxiety disorders, and 16% substance-induced organic mental disorders. Of the entire sample 26-48% had conduct/oppositional, depressive, or anxiety disorders associated with alcohol or marijuana use. In evaluating these adolescents, the importance of looking for both substance abuse and psychiatric disorders is stressed, as alcohol and drug abuse can mimic and interact with mental disorders. Psychological differences between adolescents and adults reinforced the need for separate treatment approaches for the two populations.

210 Strunin, L., & Hingson, R. (1992). **Alcohol, drugs, and adolescent sexual behavior.** *International Journal of the Addictions, 27*(2), 129-146.

In a 1990 Massachusetts-wide random digit-dial telephone survey of 16-19 year olds, 66% reported having had sexual intercourse, of whom 64% had had sex after drinking and 15% after other drug use. Only 37% reported having always used condoms. About half (49%) were more likely to have sex if they and their partner had been drinking, and 17% used condoms less often after drinking. Fewer (32%) said they would be more likely to have sex if they and their partner had used drugs, with 10% less likely to use condoms after drug use. It is concluded that since so few adolescents consistently use condoms, the greatest risk for HIV, sexually transmitted diseases, and unwanted pregnancy is the increased likelihood of having sex after drinking or drug use, rather than the decreased likelihood of condom use after drinking and drug use.

211 Swadi, H. (1992). **Relative risk factors in detecting adolescent drug abuse.** *Drug and Alcohol Dependence, 29,* 253-254.

Detecting adolescent drug abuse remains to be a difficult proposition because of its secret nature. An investigation is made of the significance of other factors as indicators of possible drug use by an adolescent. Peer drug use, suspension at school, law infringements, truancy, conflict with parents, alcohol use and cigarette smoking were the relative risk factors investigated among 953 adolescents. The most predictive of those was peer drug use. Higher numbers of those factors present in an adolescent were associated with higher the risk of possible drug use.

212 Tarter, R. E., Laird, S., & Bukstein, O. (1991). **Multivariate comparison of adolescent offspring of substance abuse parents: Community and treatment samples.** *Journal of Substance Abuse, 3*(3), 301-306.

Adolescent offspring of substance abuse parents (SA+) were compared on the scales of the scales of the Drug Use Screening Inventory to offspring of control parents (SA-). Neither clinical nor community samples of SA+ subjects were different from controls. These findings indicated that parental substance abuse did not necessarily impart maladjustment to their offspring.

213 Texas Commission on Alcohol and Drug Abuse. (1991). ***Current substance abuse trends in Texas.*** Austin, TX: Texas Commission on Alcohol and Drug Abuse.

Trends are traced in the use of substances of abuse such as cocaine, heroin, marijuana, amphetamines, alcohol, ecstasy, etc. in Texas. Data on alcohol indicated that alcohol is the predominant problem that brings clients to substance abuse treatment programs. Alcohol admissions in the first half of fiscal year 1991 constituted 46% of all admissions. The average alcohol client was 34 years old and had been using heavily for 18 years. The 1990 secondary school survey found that lifetime prevalence of alcohol use was over 80%. Though more older students reported using alcohol, the largest prevalence increases between 1988 and 1990 were in the lower grades. Consumption increased most dramatically among Black and Hispanic groups to the point that White, Black and Hispanic groups had approximately the same level of lifetime use. Students reported that more time passed between their drinking occasions, but when they drank, they consumed more alcohol. The largest increase in heavy drinking was reported in consumption of wine coolers, where the percentage of students consuming five or more drinks at a time went from 13% in 1988 to 17% in 1990. Smaller increases were reported for wine and liquor. About 40% of students in grades 4-6 in 1990 reported that they had at least tried alcohol. Alcohol is readily available, it is not considered to be as dangerous as other types of substances, and parents are thought to be ambiguous about communicating attitudes about their children's drinking.

214 Toray, T., Coughlin, C., Vuchinich, S., & Patricelli, P. (1991). **Gender differences associated with adolescent substance abuse: Comparisons and implications for treatment.** *Family Relations, 40*(3), 338-344.

Research on adult substance abusers has revealed a number of social and psychological differences between males and females that have important implications for treatment. Thus far, little attention has been paid to such gender differences in etiology, referral, and treatment among adolescent substance abusers. Data from 930 White, middle-class adolescents in treatment for substance abuse were analyzed to help clarify differences between male and female adolescent substance abusers. The gender differences which have been found in adult substance abusers were generally also found in adolescent substance abusers. Major differences were found between males and females; suicide attempts, physical/sexual abuse, and family drug history were higher for females than for males. The high rates of physical and sexual abuse reported by females is alarming, especially considering that both are related to high rates of illicit drug use. For females using drugs as a means to cope with being abused, treatment programs must address this issue and teach alternative coping means. More females than males also reported drug use by family members.

215 Tubman, J. G., Vicary, J. R., von Eye, A., & Lerner, J. V. (1991). **Qualitative changes in relationships between substance use and adjustment during adolescence.** *Journal of Substance Abuse, 3*, 405-414.

Qualitative differences were examined in the relationships between substance use and adjustment at five points of measurement from late childhood to young adulthood. The sample consisted of 133 participants from the New York Longitudinal Study (all middle class, 99% White, 78% Jewish). Data collection began in 1956, and the sample (aged 10-13 at time 1) remained 97% intact at the latest wave, in 1987. Cluster analysis was used to partition the sample into groups on the basis of multiple substance use (tobacco, alcohol, marijuana, and other substances) at each point of measurement. Cluster membership was most strongly related to adjustment differences in late childhood and young adulthood. Results from a series of ANOVAs indicated that individuals consistently using the highest amounts of multiple substance exhibited the lowest levels of psychological adjustment. But in late adolescence, when substance abuse was most normative, fewer associations were found between substance use and adjustment. Early initiation and heavy use in early adulthood were linked to poorer adjustment. These findings indicated that it may be desirable to direct substance use prevention and intervention at more focused target groups.

216 Udry, J. R. (1991). **Predicting alcohol use by adolescent males.** *Journal of Biosocial Science, 23*(4), 381-386.

The predictors of adolescent alcohol use were studied. The research sample included 101 Caucasian males, aged 13-16 years, who lived in a medium-sized southern city. The subjects were interviewed at home and blood samples obtained from a catheter were assayed for testosterone and sex hormone binding globulin. The prediction model included genetic and social variables. The study results revealed a genotype-environment interaction with very little fit with biological or social variables alone. It is noted that models containing biological or environmental variables alone may result in erroneous conclusions.

217 U.S. Department of Health and Human Services. (1991). **Alcohol and other drug use among high school students-United States, 1990**. *Morbidity and Mortality Weekly Report, 40*(45), 776-777.

Data is reviewed from the 1990 Youth Risk Behavior Survey, a national, school-based component of the Youth Risk Behavior Surveillance System. A representative sample (N=11,631) of students in grades 9-12 in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands answered questions covering use of alcohol, marijuana, and cocaine in any form over respondent's lifetime and in the preceding 30 days. Results showed that 88% of all students in the sample had tried drinking alcohol, and 59% had consumed alcohol in the 30 days preceding survey; both of these figures were higher for grade 12 than for grade 9. The heavy drinking measure indicated that 37% of all students had consumed five or more drinks on a single occasion in the month before being surveyed; of the male subjects, 44%, and of the females 30%. Only 31% of all students had tried marijuana, 14% had used in the 30-day period before the survey. Less than 7% of all students had tried cocaine, and only 2% had used it in the previous 30 days. For all measures, males were more likely than were females to have used the substances measured, and more likely to report recent and heavy use.

218 U.S. General Accounting Office. (1992, January). ***Adolescent drug use prevention: Common features of promising community programs***. (GAO/PEMD-92-2). Washington, DC: U.S. General Accounting Office.

The design, implementation, and results of comprehensive, community-based drug abuse education programs were examined by means of mail surveys and site visits, without regard to their sources of funding. Despite the frequent calls for programs of this type and growing funding, there is no body of proven, long-standing practice that could be analyzed to discover the important features associated with demonstrated success. Because completed studies of these programs are not available, successful programs cannot be identified with certainty; so it is unrealistic to discuss the results of successful programs. Instead, the most promising approaches in comprehensive, community-based drug abuse prevention are identified and described. In focusing on "promising" programs, initiatives were chosen for appearing at least well-designed, and also appearing to exhibit early signs of potential success. Definitive evidence was not available to demonstrate the effectiveness of programs visited or surveyed; nevertheless, some programs appeared to be making much more headway than others. Similarities were found in the ways that the most promising programs delivered services, even though the services themselves were often quite different. Six features were identified in programs associated with high levels of participant enthusiasm and attachment; at least one of these features was absent in programs that evoked lesser degrees of interest. This does not suggest that these features were causal factors, or that they comprised an exhaustive list of necessary elements; rather, they represent a framework of key ideas that seemed to be important, and thus deserve further trial and study. These features were: (1) a comprehensive strategy; (2) an indirect approach to drug abuse prevention; (3) the goal of empowering youth; (4) a participatory approach; (5) a culturally sensitive orientation; and (6) highly structured activities. In addition, common problems were discovered in six areas of program implementation: (1) maintaining continuity with their participants; (2) coordinating and integrating their service components; (3) providing accessible services; (4) obtaining funds; (5) attracting necessary leadership and staff; and (6) conducting evaluation (that is, there was a lack of evaluation finding on these programs).

219 U.S. General Accounting Office. (1991, August). ***Drug abuse prevention: Federal efforts to identify exemplary programs need stronger design.*** (GAO/PEMD-91-15). Rockville, MD: U.S. General Accounting Office.

The GAO found that the Department of Education and Health and Human Services unnecessarily limited the search for successful drug abuse prevention programs by considering only those with a no-use approach. Until it has been established that a particular approach works best in preventing drug use, it is unreasonable for federal recognition efforts to preclude the examination of many promising strategies. Four procedural weaknesses were found in both recognition efforts: (1) nomination procedures were not sufficiently comprehensive or systematic to allow inclusion of all eligible programs; (2) application criteria were not clearly defined; (3) evidence of effectiveness was not required; and (5) reviewer panels did not include individuals with the methodological skills to pursue or critique effectiveness evidence. Further, the Health and Human Services Exemplary Program Study did not conduct site visits to validate and supplement the evidence provided in written applications, and did not provide sufficient time to read applications. Finally, the recommendations of the Drug-Free School Recognition Program's review teams were subject to further review by a less well-informed steering committee. It is concluded that the search for effective drug abuse prevention programs will be most effective, and public confidence in the results of these federal recognition efforts will be greatest, if policies are broadened to permit review of any type of promising program and procedures are revised to increase the emphasis on evidence of effectiveness.

220 U.S. General Accounting Office. (1991, May). ***Promising community drug abuse prevention programs.*** (GAO/PEMD-91-7). Rockville, MD: U.S. General Accounting Office.

Community-based programs for drug abuse prevention are reviewed, and six features are identified as deserving wider trial and evaluation, as they were found in programs associated with high degrees of enthusiasm and attachment, and were not all present in programs with lower degrees of enthusiasm and attachment. These six features were: a comprehensive strategy, an indirect approach toward drug abuse, an aim at empowering youth and developing competency, participatory activities, a culturally sensitive approach, and highly structured activities.

221 U.S. General Accounting Office. (1991, January). ***Teenage drug use: Uncertain linkages with either pregnancy or school dropout: Report to the Chairman, Select Committee on Narcotics Abuse and Control, House of Representatives.*** Washington, DC: U.S. General Accounting Office, GAO-PEMD-91-3.

The current status of, and the recent trends in, teenage drug use, pregnancy, and school dropout are reviewed along with the post-1987 research about the relationship between teenage drug use and either pregnancy or dropping out. Statistics from public and private agencies were evaluated to describe trends in basic rates of these behaviors, and little evidence of change was found. Although the data on teenage drug use displayed a downward trend, reporting problems and estimating errors hindered their interpretation. It seems unlikely that actual drug use rose between 1979 and 1988 among youths overall, or

among individual racial or ethnic groups. The 1985 data on teenage pregnancy indicated large disparities in the pregnancy, birth, and abortion rates for women 15 to 19 years of age, while non-White and Hispanic teenagers appeared much more likely to become pregnant. Research on dropouts indicated that teenagers were leaving school less frequently than in the past. Also, Black students had substantially decreased the gap between their dropout rates and those of White students. Hispanics and Native Americans continued to drop out of school at rates considerably higher than those of White or Black students. It is suggested that these problems have changed little.

222 Van Kammen, W. B., Loeber, R., & Stouthamer-Loeber, M. (1991). **Substance use and its relationship to conduct problems and delinquency in young boys.** *Journal of Youth and Adolescence, 20*(4), 399-413.

Lifetime and six month prevalence of substance use were measured in a study on the relationship of use to conduct problems and delinquency. The research sample included 2,573 randomly selected 1st-, 4th-, or 7th-grade boys enrolled in public schools in Pittsburgh, Pennsylvania, and their principal caregivers, who responded to an interview, subjects of a longitudinal study on the causes and correlates of early forms of delinquency, for which initial screening took place in Spring 1987 and Spring 1988. The study results indicated high levels of smoking and alcohol consumption even by first graders. The use of substances such as marijuana was associated with the earlier use of substances such as beer. Students using multiple substances in the grades 1 and 4 were more likely to be engaged in a variety of conduct problems than those using single substances or nonusers. It is concluded that substance use as early as 1st grade was an indicator of boys who may manifest a variety of problem behaviors, while marijuana use in 7th grade was significantly associated with serious delinquency.

223 Velloso de Santisteban, A. (1991). **Drugs education in Western Europe.** *Comparative Education, 27*(3), 269-74.

Some Western European countries have introduced drug education into their schools, and each of them has recognized the impact of drugs on the juvenile population and is attempting to diminish it with the help of schools and other institutions. In the United Kingdom, where knowledge of drugs is thought to be widespread among youth, irrespective of their social and family environment, both primary and secondary educational programs have been organized. It is recommended that drug education should neither be given as a separate part of the curriculum nor be unconnected to the characteristics of the area in which the school is located. General health education is considered advisable in primary education and may include specific instruction on drugs. In schools and classrooms where children are aware of illegal drug abuse and ask questions about it, instruction should include suitable teaching material in order to make children aware of the dangers of using drugs and to increase their general knowledge of existing drugs. These general guidelines for primary education are also followed at the secondary level. However, they must take into account that pupils may have experimented with drugs and that the adolescent range of interests is more varied than that of young children. Drug instruction may be part of a health course, along with nutrition and sex instruction, or be included in social, moral or religious instruction. In Sweden, the idea prevails that "it is essential that the entire society takes a unified stand against drug abuse. Everyone is affected in one way or another, and primary prevention must reach all citizens-from pre-school children (an optional stage for children, but compulsory for municipal authorities) to

retirees." Although all pupils receive education related to their experience, drug education is mostly focussed on adolescents, particularly as, according to the National Board, "Even if the object is to reach all age groups, teen-agers are the central focus. This is the age during which drug attitudes are formed, when they get drunk for the first time and perhaps try 'hash'. This is when careers of abuse begin, and it is therefore quite obvious that this is the group to prioritize in drug prevention work." In France, preventive educational methods against drug addiction are decreed by the Minister of National Education. One of these was the recent inclusion in *troisième* (the last of the compulsory secondary levels, for 15 year-olds) of knowledge about drug abuse. On a wider basis, health and safety instruction has been introduced into the general study programs of the other classes at this level, *sixième*, *cinquième*, and *quatrième*. It is usually given by biology teachers, who are considered the most suited to this task. The authorities' opinion is that pupils must be protected against a series of threats and distractions—not only drug addiction, alcoholism or smoking, but also violence, theft and sexually-transmitted diseases. In Spain, a 1985 study found that only about 20% of school children who should be receiving help from prevention teams actually got help. These teams are independent of school, and are composed of psychologists, doctors and police. Their jobs involve leading discussions, presenting leaflets, and giving audiovisual presentations. It would be unreasonable to assume that education alone can stop drug abuse, as the remedy is not simply a matter of transmitting knowledge to pupils. They themselves must adopt a certain lifestyle which, in many cases, is opposed to that prevailing in modern industrial society.

224 Wallace, J. M., & Bachman, J. G. (1991). **Explaining racial/ethnic differences in adolescent drug use: The impact of background and lifestyle**. *Social Problems*, *38*(3), 333-354.

Past research has shown large racial/ethnic differences in adolescent drug use, with use highest among Native American youth, somewhat lower among White and Hispanic youth, and lowest among Black and Asian youth. The often large racial/ethnic differences in cigarette, alcohol, marijuana, and cocaine use may be attributable to racial/ethnic differences in background and/or in important lifestyle factors. The research sample was taken from the Monitoring the Future Project (the National High School Seniors Survey) and included large nationally representative samples of high school seniors, up to 17,000 each year, for a total of approximately 77,500 students of whom 77.5% were White, 11.9% Black, 4.4% Mexican American, 2.6% Asian American, and 1.6% Native American. The results indicated that controlling for background alone does not account for most racial/ethnic differences in drug use. In fact, if Black youth were as likely as White youth to live in two parent households and have highly educated parents, their drug use might be even lower than reported. Controlling for background alone did not reduce Native Americans' relatively high drug use, suggesting that their level of use may be linked to their disadvantaged socioeconomic status. When both background and lifestyle factors were controlled, many of the racial/ethnic differences in drug use were considerably reduced or eliminated. Several lifestyle factors—including educational values and behaviors, religious commitment, and time spent in peer oriented activities—strongly related to drug use and helped to explain the subgroup differences.

225 Walter, H. J., Vaughan, R. D., & Cohall, A. T. (1991). **Risk factors for substance use among high school students: Implications for prevention.** *Journal of the American Academy of Child and Adolescent Psychiatry, 30*(4), 556-562.

To identify salient risk factors for drug use that could be targeted for modification in prevention programs, a survey was administered to a sample of 1,091 urban and suburban 10th-grade students (from New York City and Rockland County, New York, respectively). Substantial proportions of students reported alcohol and cigarette use in the past year, and around 10 reported heavy use of these substances. Most marijuana use was experimental. In general, the measured risk factors most strongly associated with the use of alcohol, cigarettes, and marijuana were those derived from the socialization model of substance use; however, certain factors derived from the stress/strain and disaffiliation models also were related to increased drug use risk. It is suggested that the weight of evidence on etiology and prevention of substance use argues for a two-tiered intervention strategy, with the first tier targeting prevention of experimentation, stressing health risks, and training in resistance skills, and the second tier targeting prevention of substance abuse among troubled adolescents, with pharmacological, psychotherapeutic, social, and remedial intervention. This suggestion is supported with a brief review of program evaluations.

226 Weaver, D. (1992, March). ***Technology products for substance abuse prevention***. Portland, OR: Western Regional Center for Drug-Free Schools and Communities.

New technology products are available as resources for alcohol and other drug education. New, more sophisticated software has been developed and new technologies such as interactive videodiscs, CD-ROM, and satellite courses have slowly emerged as viable applications of technology for K-12 education. "Technology Products" are defined to include computer software, interactive videodiscs (level III), non-interactive videodiscs (level I), and distance learning courses delivered via satellite or other forms of advanced technology. Only products that are designed to instruct students, teachers, or parents about alcohol and other drugs are included. A review of currently available products found that educational technology products have not improved very much during the previous three and a half years. Some programs attempted to teach students responsible use of alcohol, ignoring or down-playing the fact that alcohol use is illegal and harmful for adolescents. Those programs with decision-making simulations, are faulted for conveying a mixed message to students. Although the point of the program is to show students the consequences of decisions they make regarding alcohol and other drug use, the fact that they have a choice means that they could choose to use drugs. Most of the programs did an excellent job of teaching students the physiological effects, psychological effects, types of drugs, proper and street terminology for drugs, and more. The intent of this approach in isolation is to empower the students with information so that they can make informed decisions regarding alcohol and other drug use: again the aim of allowing choices is faulted as a mixed message. The vast majority of the software programs are tutorial in nature. They are comprised of a linear sequence of text and graphic screens followed by one or more multiple-choice or true-false questions. The tutorials are designed to be used independently by a single student at a time. One of the critical audiences for substance abuse prevention programs are at risk high school student. Students who are statistically at risk of using alcohol or other drugs because of factors such as low academic achievement, parental use, or low socioeconomic status, are not likely to be motivated by the tutorial approach of most of these packages. A program which encourages group participation would be more appropriate for this audience rather than tutorials.

227 Webb, J. A., Baer, P. E., McLaughlin, R. J., McKelvey, R. S., & Caid, C. D. (1991). **Risk factors and their relation to initiation of alcohol use among early adolescents.** *Journal of the American Academy of Child and Adolescent Psychiatry, 30*(4), 563-568.

The relationship between risk factors and initiation of alcohol consumption was studied over a 15-month period among a cohort of 7th-graders who did not drink alcoholic beverages at the start of the study. Subjects responded twice to 200-item questionnaires, once at the start of the study and once 15 months later. The relationship between risk factors and alcohol use was examined using a discriminant function analysis. At the univariate level, rejection of parental authority, deviant behavior, and sensation seeking were statistically significant. The discriminant function retained only three of the risk factors: rejection of parental authority, deviant behavior, and religious commitment. The study results indicated that risk factors related to deviant behavior and family dysfunction precede the beginning of alcohol use and are not the result of alcohol use. Surprisingly, risk factors related to peer use and approval of use as well as risk factors related to parental use were not found to be significant predictors. The study suggested that family involvement is an important component, especially for high-risk adolescents, and that intervention strategies should be designed to provide support and training for parents. Results confirmed that primary prevention programs must be directed to students who have not initiated substance use, and that interventions need to be targeted to the specific risks faced by the students they serve, and family and community need to be involved in the intervention.

228 Weber, J. A., & McCormick, P. (1992). **Alateen members' and non-members' understanding of alcoholism.** *Journal of Alcohol and Drug Education, 37*(3), 74-84.

Alateen and non-Alateen members were compared on their knowledge and understanding of alcoholism. The adolescents sampled were also given the opportunity to openly discuss what their recommendations would be for a friend who was an alcoholic and what items they would like to see in an educational curriculum. Results indicated that Alateen members understood alcoholism as a family disease, that family members are not responsible for an alcoholic's condition or behavior, and alcoholism is treatable. Alateen members suggested that an educational curriculum be designed with a message of successful treatment and hope for an alcoholic's condition while non-Alateen members stressed the importance of understanding and gathering the facts about alcoholism.

229 Werch, C. E., Young, M., Clark, M., Garrett, C., Hooks, S., & Kersten, C. (1991). **Effects of a take-home drug prevention program on drug-related communication and beliefs of parents and children.** *Journal of School Health, 61*(8), 346-350.

A sample of 511 students in grades 4, 5, and 6 at a group of six schools in northwest Arkansas, along with the students, participated in this study. Students were blocked on school and grade level, then assigned randomly by class to either the intervention Keep A Clear Mind (KACM) program or a waiting-list control. KACM students received four weekly correspondence lessons designed to be completed at home with a parent. KACM students reported significantly less perceived peer use of alcohol, tobacco, and marijuana, as well as significantly less peer pressure susceptibility to experiment with cigarettes. Mothers in the KACM program reported significantly more recent and frequent communication with their children about refusing drugs, and significantly greater

discussions with their children regarding how to resist peer pressure to use alcohol, tobacco, and marijuana. Intervention program fathers reported significantly more communication with their children concerning how to resist peer pressure to drink alcohol and use tobacco, and significantly greater motivation to help their children avoid drug use. No significant differences were found between groups on students' intentions to use drugs, nor on parental drug beliefs. This apparent failure might be due to a ceiling effect caused by low intentions to use, and already strong parental beliefs before program initiation, or it might indicate a weakness in the program. Overall, the data suggested that a print medium emphasizing parent-child activities holds promise for accessing families and enhancing drug prevention communication.

230 White, H. R., Pandina, R. J., Johnson, V., Bry, B. H., & McKeon, P. E. (1991). **Treatment outcome assessments of adolescent clients.** In B. Forster, & J. C. Salloway (Eds.), *Preventions and treatments of alcohol and drug abuse: A socio-epidemiological sourcebook* (pp. 241-274). (Interdisciplinary studies in alcohol and drug use and abuse 7). Lewiston, NY: Edwin Mellen Press.

The effectiveness of a coordinated service-delivery model was assessed, providing services for adolescents exhibiting alcohol and drug-related problems from a treatment-outcome perspective. The assessment focused on the changes that clients experienced during their treatment careers. Three questions were addressed: (1) In what ways did clients change during their treatment experiences within the system? (2) Did treatment contact influence the degree of client change? and (3) What factors significantly influenced client change? Objective and subjective indicators were used to study a sample of 197 adolescents. Analysis of the objective indicators revealed that the majority of clients who received direct treatment services (the treatment group) did not experience positive changes in several major problem areas including: alcohol-using and drug-using behavior, educational status, and psychosocial functioning. However, a majority of these clients did improve in their perceptions of their parental environment. Analysis of subjective indicators, revealed that the majority of clients and their parental figures perceived both problem improvement and overall positive changes in the life-functioning of clients. Clients perceived a general improvement in alcohol-using and drug-using behavior. However, counselors perceived no changes in the functioning of the clients. Comparisons between clients who received treatment and clients who entered but did not receive treatment indicated that both groups improved to the same extent. The results also suggested that treatment reduced arrests.

231 White, K. R., Taylor, M. J., & Moss, V. D. (1992). **Does research support claims about the benefits of involving parents in early intervention programs?** *Review of Educational Research, 62*(1), 91-125.

It is widely believed that early intervention programs that involve parents are more effective than those that do not. The types of parent involvement programs implemented in previous early intervention research are reviewed, and the benefits allegedly associated with the involvement of parents in early intervention programs are discussed. An analysis of previous research on the alleged benefits shows that there is no convincing evidence that the ways in which parents have been involved in previous early intervention research studies result in more effective outcomes. Possible reasons for the lack of observed benefits are offered: using parents as supplemental intervenors might be the wrong

approach; tested parent involvement programs might be poorly implemented, or the parents might not be participating as desired; and the effects of parental involvement activities are poorly understood.

232 Wilson, J. R., & Crowe, L. (1991). **Genetics of alcoholism: Can and should youth at risk be identified?** *Alcohol Health & Research World, 15*(1), 11-17.

Literature on the genetics of alcoholism is reviewed, particularly as pertaining to the identification of adolescents at risk. Topics covered include: studies of twins; studies of adopted- away sons of alcoholics; genetic predisposition; ethical questions; should youth at risk be identified; and possible interventions and potential consequences. Genetic and behavioral markers of alcoholism may one day be used for early detection of individuals at risk. However, the concept of early detection raises concerns as to the possible biological and social consequences, which may include isolation and/or stigmatization, for a young person identified as predisposed to becoming alcoholic. It is concluded that it is necessary to study the genetics of alcoholism but that the diversity and pluralism of societal values suggest the need for considerable caution.

233 Windle, M. (1991). **Alcohol use and abuse: Some findings from the National Adolescent Student Health Survey.** *Alcohol Health & Research World, 15*(1), 5-10.

Data is reported from the National Adolescent Student Health Survey. The sample of 11,400 students, in grades 8 and 10, from 224 schools in 20 states, was surveyed during the fall of 1987. Survey questions pertained to various features of adolescent health, including alcohol and other drug use. Not all questions were asked of all students, in order to allow as wide as possible a range of issues related to adolescent health to be included in the questionnaire. A core set of 11 questions, concerning, for example, demographic and general alcohol-use information, was presented to all students. Other questions, such as those related to heavy drinking, were administered to only one-third of the sample. The results indicated that many adolescents (75.9% of 8th-graders and 87.3% of 10th-graders) have used alcohol in their lifetime. More 10th-grade students reported consuming alcohol than 8th-grade students. This was reflected by the decrease in the percentage of abstaining students in 10th grade, the relatively stable percentage of infrequent drinkers in both 8th and 10th grades, and the approximate doubling of the number of 10th-graders who said they drink occasionally or frequently. More 10th-grade students than 8th-grade students had consumed five or more consecutive drinks on at least one occasion during the past 2 weeks. The numbers of male and female students who had used alcohol during their lifetime were similar for the two grade levels. Gender differences in the numbers of students who drink dwindled, but, more male adolescents fell into the frequent-drinking category. Racial and ethnic group comparisons across grade levels consistently indicated that fewer Black students have used alcohol than White or Hispanic students. Black students represent the largest percentage of abstainers both across grade levels and gender groups, and had the lowest overall rates of alcohol consumption. Tenth-grade White and Hispanic students represented the largest percentage of adolescents falling into the category of frequent drinking. Among racial and ethnic groups, the numbers of students who had engaged in heavy drinking during the past 2 weeks paralleled the findings for frequencies of drinking. That is, White and Hispanic adolescents were much more likely to have consumed five or more consecutive drinks in the past 2 weeks than were Black adolescents. Additional research is required to establish the prevalence of drinking

behavior among ethnic groups, including Native American and Asian students. Among 10th-grade males, heavy drinkers, relative to nonheavy drinkers, had an earlier onset of first alcohol use. Between students in 8th-grade and those in 10th-grade, there were clear trends toward increasing levels of alcohol involvement. Not only were more 10th-grade students drinking, but a greater proportion of those who consumed alcohol were drinking much more frequently. The discrepancy between the numbers of male and female students who consumed alcohol was small, but males were more highly represented in the more frequent and heavier drinking categories. A large percentage (approximately 15% to 20%) of adolescents reported high levels of alcohol use and poly-drug use, meriting increased attention from researchers and health care professionals.

234 Winters, K. C., Stinchfield, R. D., Henly, G. A., & Schwartz, R. H. (1991). **Validity of adolescent self-report of alcohol and other drug involvement.** *International Journal of the Addictions, 25*(11A), 1379-1395.

Validity of adolescent self-report of alcohol and drug use and consequential effects and problems is examined in terms of its importance in research and clinical work. Findings from a recent study are presented that focused on self-report temporal stability and response bias tendencies as evidence of validity of self-report. Study results indicated that the great majority of drug clinic and school teenagers gave temporally consistent reports of substance involvement and that only a small proportion of drug clinic and school subjects presented extreme response bias tendencies.

235 Workman, M., & Beer, J. (1992). **Depression, suicide ideation, and aggression among high school students whose parents are divorced and use alcohol at home.** *Psychological Reports, 70*(2), 503-511.

High school students from a small rural high school (N=106) completed the Children of Alcoholics Scale, Zaks and Walters' Aggression Scale, Beck Depression Scale, and a modified version of the Beck Scale of Suicide Ideation. Analyses of variance showed boys were not experiencing suicide ideation any more than girls; suicide ideation was similar across the four grades, but on aggression alcohol-dependent boys scored significantly higher than girls, and in grade 9 boys' scores were significantly higher than those in grade 10. The sophomores' scores on alcohol dependency were significantly lower than the freshmen's scores. Boys and children from divorced homes had higher scores on aggression than girls and children from nondivorced homes. Children from homes in which alcohol was used had higher depression scores than children from nonalcoholic homes. Freshman girls and sophomore boys had higher depression scores than senior boys and girls. A Pearson *r* of 0.28 between scores on alcohol dependency and suicide ideation was significant, but research is needed to understand better the associations of thought of suicide and drug-alcohol dependency among high school students so strategies for prevention and intervention can be focused.

236 Young, M., & Rausch, S. (1991). **Be a Winner: Arkansas' approach to involving law enforcement officers in drug education.** *Journal of Drug Education, 21*(2), 183-189.

An evaluation is reported of the Be a Winner program, an eight-week, police officer-led drug education program implemented in grades 5 and 6 in rural Arkansas public schools. The experimental group of 105 was exposed to the curriculum, and the control group of 67 did not. Students who had been through the program were more likely to indicate that they could resist pressure to drink alcohol, and less likely to report that a majority of kids their age used alcohol and marijuana, were more apt to recognize an unsafe use of aspirin and were more likely to report that their family was important to them. Some positive changes were reported from pre-test to post-test: improvements were found in decision-making skills, as well as positive change in some attitudes and beliefs about substance use. For many test items which did not show change, the majority of subjects had already been choosing the desired anti-drug response at pre-test.

237 Zimmerman, M. A., & Maton, K. I. (1992). **Life-style and substance use among male African-American urban adolescents: A cluster analytic approach.** *American Journal of Community Psychology, 20*(1), 121-138.

Lifestyle and substance use by male African-American adolescents living in an urban area were studied. The research sample included 218 male adolescents from inner-city Baltimore, Maryland, with a mean age of 17 years. Of the students, 70% left school before graduation, 132 reported their fathers were employed, and 167 reported their mothers were employed. The cluster analysis included the four variables of school attendance, employment, church attendance, and delinquency, to develop life-style profiles and five clusters were compared on cigarette, alcohol, marijuana, and hard drug use. The study results indicated that a life-style such as leaving school that included a compensatory component such as church involvement might have been more adaptive than one that does not. These compensatory life-styles might include less alcohol and drug use.

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